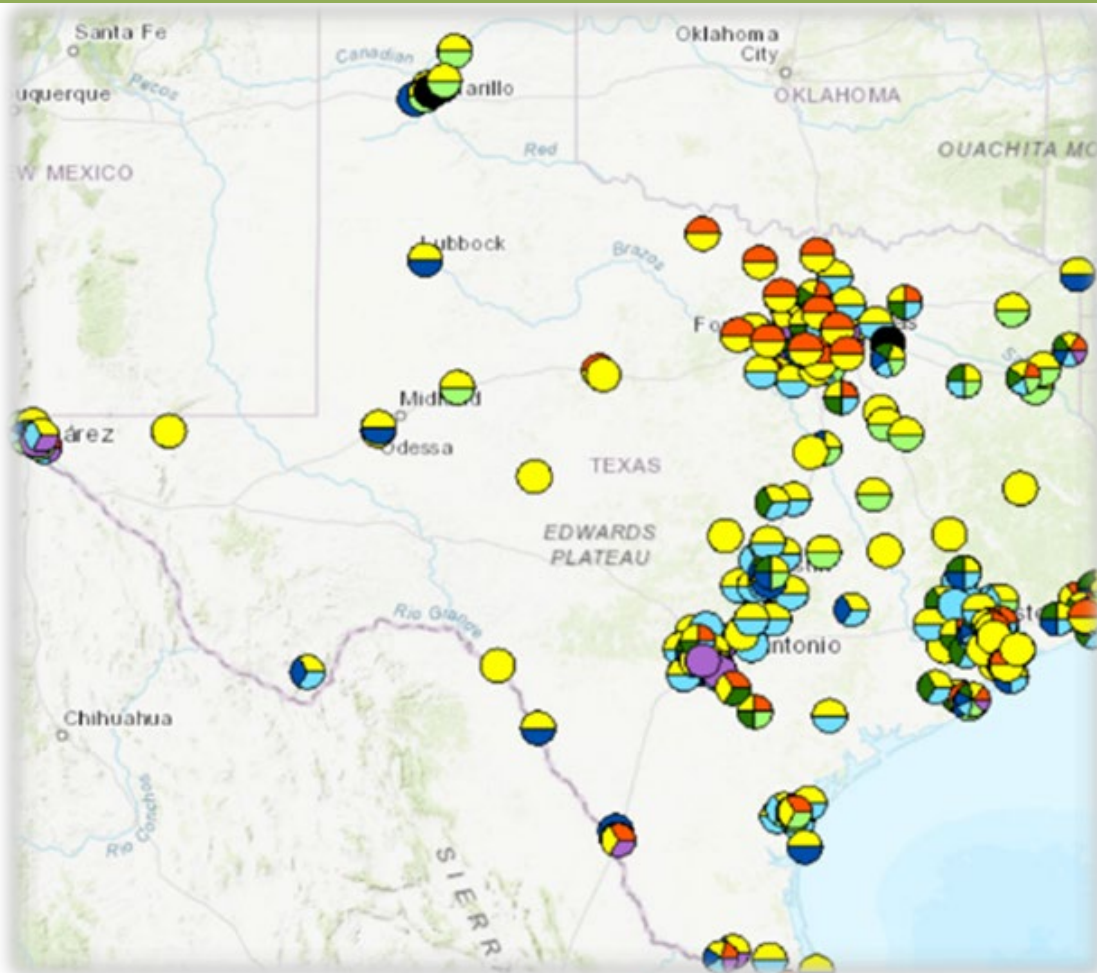


Texas Commission on Environmental Quality Annual Monitoring Network Plan



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Table of Contents

<i>List of Appendices</i>	4
<i>List of Tables</i>	4
<i>List of Acronyms and Abbreviations</i>	5
INTRODUCTION	7
REGULATORY NETWORK REVIEW	8
<i>Nitrogen Dioxide.....</i>	8
Monitoring Requirements.....	8
Previously Recommended Changes.....	9
Regulatory NO ₂ Monitoring Network Changes.....	10
<i>Sulfur Dioxide.....</i>	10
Monitoring Requirements.....	10
Previously Recommended Changes.....	11
Regulatory SO ₂ Monitoring Network Changes.....	11
<i>Lead.....</i>	12
Monitoring Requirements.....	12
Previously Recommended Changes.....	13
Regulatory Pb Monitoring Network Changes	13
<i>Ozone.....</i>	13
Monitoring Requirements.....	14
Previously Recommended Changes.....	14
Regulatory O ₃ Monitoring Network Changes.....	14
<i>Carbon Monoxide</i>	15
Monitoring Requirements.....	15
Previously Recommended Changes.....	15
Regulatory CO Monitoring Network Changes	15
<i>Particulate Matter of 10 Micrometers or Less</i>	15
Monitoring Requirements.....	16
Previously Recommended Changes.....	16
Regulatory PM ₁₀ Monitoring Network Changes.....	17
<i>Particulate Matter of 2.5 Micrometers or Less</i>	17
Monitoring Requirements.....	17
Previously Recommended Changes.....	19
Regulatory PM _{2.5} Monitoring Network Changes	22
<i>Volatile Organic Compounds.....</i>	23

Monitoring Requirements	23
Previously Recommended Changes.....	23
Regulatory VOC Monitoring Network Changes	23
<i>Carbonyls.....</i>	23
Monitoring Requirements.....	23
Previously Recommended Changes.....	23
Regulatory Carbonyl Monitoring Network Changes	24
<i>Meteorology</i>	24
Monitoring Requirements.....	24
Previously Recommended Changes.....	24
Regulatory Meteorology Monitoring Network Changes.....	25
NON-REGULATORY NETWORK REVIEW	25
<i>Semi-Volatile Organic Compounds</i>	25
CONCLUSION	25

List of Appendices

Appendix A – 2020 Summary of Proposed Network Changes

Appendix B – Ambient Air Monitoring Network Site List

Appendix C – Population and Criteria Pollutant Monitor Status by Metropolitan Statistical Area

Appendix D – Nitrogen Dioxide, Nitrogen Oxide, and Total Reactive Nitrogen Monitor Status

Appendix E – Sulfur Dioxide Monitor Status

Appendix F – Sulfur Dioxide Ongoing Data Requirements Annual Report

Appendix G – Total Suspended Particulate Lead Monitor Status

Appendix H – Ozone Monitor Status

Appendix I – Carbon Monoxide Monitor Status

Appendix J – Particulate Matter of 10 Micrometers or Less Monitor Status

Appendix K – Particulate Matter of 2.5 Micrometers or Less Monitor Status

Appendix L – Volatile Organic Compound and Carbonyl Monitor Status

List of Tables

Table 1: National Core Multipollutant Monitoring Stations

Table 2: 2016-2018 Lead Point Source Emissions Inventory Data

Table 3: Ozone Monitoring Requirements

Table 4: Particulate Matter of 10 Micrometers or Less Minimum Monitoring Requirements

Table 5: Particulate Matter of 2.5 Micrometers or Less Minimum Monitoring Requirements

Table 6: Particulate Matter of 2.5 Micrometers or Less FEM Quality Control Collocation Requirements

Table 7: Particulate Matter of 2.5 Micrometers or Less Summary of Approved Changes

Table 8: Particulate Matter of 2.5 Micrometers or Less Recommendations and Method Code Changes

List of Acronyms and Abbreviations

- number

§ - part

% - percent

> - greater than

≥ - greater than or equal to

< - less than

µg/m³ - micrograms per cubic meter

AMNP - annual monitoring network plan

autoGC - automated gas chromatograph

CBSA - core based statistical area

CFR - Code of Federal Regulations

CO - carbon monoxide

DFW - Dallas-Fort Worth

DRR - Data Requirements Rule

EI - emissions inventory

EPA - United States Environmental Protection Agency

FEM - federal equivalent method

FRM - federal reference method

LBJ - Lyndon B. Johnson

LLC - limited liability company

MSA - metropolitan statistical area

NA - not applicable

NAAQS - National Ambient Air Quality Standards

NCore - National Core Multipollutant Monitoring Stations

NEI - National Emissions Inventory

NO₂ - nitrogen dioxide

NO - nitrogen oxide

NO_x - oxides of nitrogen

NO_y - total reactive nitrogen compounds

O₃ - ozone

PAMS - Photochemical Assessment Monitoring Stations

Pb - lead

PM₁₀ - particulate matter of 10 micrometers or less in diameter

PM_{2.5} – particulate matter of 2.5 micrometers or less in diameter

PM_{10-2.5} – coarse particulate matter

ppb – parts per billion

PWEI – population weighted emissions index

QC – quality control

RA-40 – Regional Administrator 40

SE – southeast

SLAMS – State or Local Air Monitoring Stations

SO₂ – sulfur dioxide

SPM – special purpose monitor

TAD – technical assistance document

TCEQ – Texas Commission on Environmental Quality

TEOM – tapered element oscillating microbalance

tpy – tons per year

TSP – total suspended particulate

U.S. – United States

UTEP – University of Texas at El Paso

VOC – volatile organic compound

Introduction

Title 40 Code of Federal Regulations (CFR) Part (§)58.10 requires states to submit an annual monitoring network plan (AMNP) to the United States (U.S.) Environmental Protection Agency (EPA) by July 1 of each year. This monitoring plan is required to provide the implementation and maintenance framework for an air quality surveillance system, known commonly as the ambient air quality monitoring network. The AMNP must be available for public inspection and comment for at least 30 days prior to submission to the EPA. The Texas Commission on Environmental Quality (TCEQ) submits the AMNP to the EPA for final review and approval along with comments (and responses) received during the 30-day inspection period.

The AMNP provides information on the current TCEQ ambient air monitoring network established to determine compliance with federal monitoring requirements specified in 40 CFR §58 and its appendices. This document presents the current federal network established for use in evaluations to determine compliance with the National Ambient Air Quality Standards (NAAQS) and to meet federal monitoring requirements and objectives. This document is limited to the portion of the TCEQ air monitoring network designed to comply with federal monitoring requirements and supported by federal funding. The TCEQ also operates a robust network of state-initiative monitors that support a variety of purposes including potential health effects evaluation, however these monitors are outside the scope of this document and are not included. This document includes the recommended federal monitoring network changes from July 1, 2019, through December 31, 2021, which are summarized in AMNP Appendix A.

Title 40 CFR §58, Appendix D provides the minimum design requirements for air monitoring networks including State or Local Air Monitoring Stations (SLAMS), Photochemical Assessment Monitoring Stations (PAMS), and National Core Multi-Pollutant Monitoring Stations (NCore). AMNP Appendix B lists existing monitors established to meet federal monitoring requirements and objectives.

Based on annual internal audits performed to date, all monitoring sites supporting federal requirements and monitoring objectives are meeting the requirements defined in 40 CFR §58 Appendices A, B, C, D, and E, with the following exceptions.

- The TCEQ is seeking new property owners and developing site specifications to relocate the Midlothian OFW site, which is not meeting siting criteria.
- The TCEQ is assessing network air monitoring probe placement to ensure compliance with 40 CFR §58, Appendix E, Section 2.0.
- The TCEQ requests a waiver under 40 CFR §58, Appendix E, Section 10.1.1 for the existing Austin Webberville site. The Austin Webberville site particulate monitors are located less than ten meters from the roadway preventing the site from meeting siting criteria, however, air monitoring data are deemed representative of the neighborhood scale area due to the site deployment date, historical data, and low traffic count.

The following sites will be relocated at the request of the property owner.

- The TCEQ Austin Northwest site is temporarily decommissioned due to property owner construction; the site will be relocated approximately 0.10 miles to Austin North Hills Drive.

- The TCEQ Nederland High School site will be relocated due to property owner construction.

AMNP Appendix C lists Texas core based statistical areas (CBSAs) or metropolitan statistical areas (MSAs), 2018 U.S. Census Bureau population estimates, and required monitor counts. The TCEQ uses these data to evaluate the networks as documented in the AMNP. The U.S. Office of Management and Budget defined CBSAs and MSAs overlap in Texas, and the terms are used interchangeably in this assessment according to usage in the federal regulations.

Regulatory Network Review

Nitrogen Dioxide

The TCEQ nitrogen dioxide (NO₂) network includes nitrogen oxide (NO), NO₂, true NO₂, and total reactive nitrogen compound (NO_y) monitoring requirements. The TCEQ NO₂ network is designed to meet area-wide, Regional Administrator 40 (RA-40), near-road, PAMS, and NCore monitoring requirements. The TCEQ is required to operate 20 monitors that measure NO, NO₂, true NO₂, and NO_y and exceeds the requirements with 55 monitors that measure those pollutants. AMNP Appendix D lists the monitoring requirements for NO, NO₂, true NO₂, and NO_y in each Texas CBSA. AMNP Appendix B lists the air monitoring sites where NO, NO₂, true NO₂, and NO_y are measured.

Monitoring Requirements

Area-Wide Monitoring Requirements

Title 40 CFR §58, Appendix D, Section 4.3.3 requires one area-wide ambient air quality monitoring site in each CBSA with a population of 1,000,000 or more persons. The requirements stipulate that these sites be located in the areas with the highest expected NO₂ concentration that are also representative of a neighborhood or larger (urban) spatial scale. Title 40 CFR §58, Appendix D, Section 4.3.5 (3) and (4), define neighborhood scale monitoring as representative of ambient air concentrations in an area between 0.5 and 4.0 kilometers with relatively uniform land use. Urban scale monitoring is representative of ambient air concentrations over large portions of an urban area with dimensions between 4 and 50 kilometers.

Based on 2018 U.S. Census Bureau population estimates for Texas as noted in Appendix D, area-wide neighborhood or urban scale NO₂ monitoring is required in four Texas CBSAs. The NO₂ monitors at the following sites meet these area-wide requirements.

- Dallas-Fort Worth-Arlington (DFW) CBSA: Dallas Hinton
- Houston-The Woodlands-Sugar Land (Houston) CBSA: Clinton
- San Antonio-New Braunfels (San Antonio) CBSA: San Antonio Northwest
- Austin-Round Rock (Austin) CBSA: Austin Northwest

Regional Administrator Monitoring Requirements

Title 40 CFR §58, Appendix D, Section 4.3.4 states that the EPA Regional Administrators collaborate with the states to designate a minimum of 40 NO₂

monitoring stations nationwide that are positioned to protect susceptible and vulnerable populations. The TCEQ collaborated with the EPA to identify the four Texas monitoring sites listed below to meet this requirement.

- DFW CBSA: Arlington Municipal Airport
- Houston CBSA: Clinton
- El Paso CBSA: Ascarate Park Southeast (SE)
- Beaumont-Port Arthur (Beaumont) CBSA: Nederland High School

Near-Road Monitoring Requirements

Title 40 CFR §58, Appendix D, Section 4.3.2 requires one microscale near-road NO₂ monitor located near a major road with high annual average daily traffic counts in each CBSA with a population of 1,000,000 or more persons. An additional near-road monitor is required in each CBSA with a population of 2,500,000 or more persons. The TCEQ near-road monitoring network meets these requirements with the six current sites and one pending site listed below.

- DFW CBSA: Dallas LBJ Freeway and Fort Worth California Parkway North
- Houston CBSA: Houston Southwest Freeway and Houston North Loop
- San Antonio CBSA: San Antonio Interstate 35 and new site proposed in the AMNP Regulatory NO₂ Monitoring Network Changes section below
- Austin CBSA: Austin North Interstate 35

NCore and PAMS Monitoring Requirements

The TCEQ meets NCore monitoring requirements listed in 40 CFR §58, Appendix D, Section 3(b) with NO and NO_y measured at the NCore sites listed in Table 1.

The EPA revisions to the PAMS program under the final rule published October 26, 2015, and listed in 40 CFR §58, Appendix D, Section 5, require state agencies to collect and report NO, true NO₂, and NO_y measurements at NCore sites in CBSAs with 1,000,000 or more persons. The TCEQ meets the PAMS network monitoring requirements with hourly averaged NO, NO₂, and NO_y measured at the Dallas Hinton and Houston Deer Park number (#) 2 sites.

Table 1: National Core Multipollutant Monitoring Stations

Core Based Statistical Area	Site Name	2018 Population Estimates*	PAMS
Dallas-Fort Worth-Arlington	Dallas Hinton	7,539,711	Yes
Houston-The Woodlands-Sugar Land	Houston Deer Park #2	6,997,384	Yes
El Paso	El Paso Chamizal	845,553	No

*United States Census Bureau population estimates as of July 1, 2018.

- number

PAMS - Photochemical Assessment Monitoring Stations

Previously Recommended Changes

The TCEQ 2019 AMNP recommended changing the oxides of nitrogen (NO_x) monitor network designations for Camp Bullis, Eagle Mountain Lake, and Corsicana Airport from state initiative to special purpose monitors (SPM) supporting federal monitoring

objectives, at Keller from state-initiative to PAMS, and at Conroe Relocated and Dallas North #2 from SLAMS to PAMS. The TCEQ 2019 AMNP also recommended deploying a NO_x monitor to the new Houston West End site, named Houston Harvard Street. The EPA approved the requests in a letter dated November 4, 2019. The network designations changes were effective January 1, 2020, and the new Houston Harvard Street site monitor is expected to be operational soon.

The TCEQ changed the Floresville Hospital Boulevard and Karnes County NO_x monitors from state initiative to federal SPM, to support modeling and regional data analysis, effective January 1, 2020. The TCEQ Austin Northwest NO_x monitor was temporarily shut down on February 18, 2020, due to property owner construction. The air monitoring station and NO_x monitor will be permanently relocated approximately 0.10 miles to Austin North Hills Drive by June 30, 2020. The monitor designation changes and site relocation were approved by the EPA in a letter dated April 10, 2020.

Regulatory NO₂ Monitoring Network Changes

The TCEQ recommends deploying a second near-road monitoring station in the San Antonio MSA to meet the near-road requirement in CBSAs with 2,500,000 or more persons based on the latest available census figures. The TCEQ will explore possible new sites and propose a viable location adjacent to the highest possible ranked road segment by December 31, 2020, and deploy the site by December 31, 2021.

Sulfur Dioxide

The TCEQ sulfur dioxide (SO₂) network includes monitors sited to meet ambient SO₂ and high-sensitivity SO₂ monitoring requirements. The TCEQ SO₂ network is designed to meet the population weighted emissions index (PWEI) by CBSA, 2015 *Data Requirements Rule (DRR) for the 1-Hour Sulfur Dioxide Primary NAAQS*, and NCore monitoring requirements. The TCEQ is required to operate a total of 20 SO₂ monitors and exceeds the requirements with 32 monitors. A summary of the PWEI calculations, monitoring requirements, and current number of SO₂ monitors in each CBSA is shown in AMNP Appendix E. AMNP Appendix B lists the air monitoring sites where SO₂ is measured.

Monitoring Requirements

Population Weighted Emissions Index Requirements

Title 40 CFR §58, Appendix D, Section 4.4.2, requires states to establish an SO₂ monitoring network based on the PWEI calculations for Texas CBSAs. These indices are calculated by multiplying the CBSA population by the emissions inventory (EI) data for counties within that CBSA. The calculated values are divided by one million to obtain the CBSA PWEI. The PWEI monitoring requirements include the following.

- one monitor in CBSAs with a PWEI equal to or greater than 5,000, but less than 100,000
- two monitors in CBSAs with a PWEI equal to or greater than 100,000, but less than 1,000,000
- three monitors in CBSAs with a PWEI equal to or greater than 1,000,000

The TCEQ used 2018 U.S. Census Bureau population estimates and 2017 National Emissions Inventory (NEI) data with 2018 TCEQ point-source EI data to calculate the PWEIs and to determine the minimum monitoring requirements for each CBSA. The TCEQ meets the PWEI requirements with six monitors as shown in AMNP Appendix E.

Data Requirements Rule (DRR) Requirements

Title 40 CFR §51.1205(b) (the DRR) required air agencies to characterize air quality around specified sources that emitted 2,000 tons per year (tpy) or more of SO₂ in the latest emissions inventory year (2014 for Texas). The TCEQ identified 24 sources for air quality characterization, including 16 sites identified for evaluation by monitoring. Per the DRR, 11 new SO₂ source-oriented monitors located near 13 sources were installed and operating by January 1, 2017. Details for the TCEQ's SO₂ source evaluation, modeling, and monitoring recommendations are in the TCEQ 2017 AMNP.

For seven SO₂ sources where the air quality was characterized by modeling actual SO₂ emissions, the DRR requires the TCEQ to submit an annual report that documents the annual emissions, provide an assessment of the cause of any emissions increase from the previous year, and make a recommendation regarding further modeling needs. The DRR-required assessment and recommendation are provided in AMNP Appendix F.

NCore Requirements

Title 40 CFR §58, Appendix D, Section 3 requires states to monitor SO₂ at NCore sites. The TCEQ meets this requirement with three high-sensitivity SO₂ monitors at the NCore sites listed in Table 1.

Previously Recommended Changes

The TCEQ 2019 AMNP recommended no changes to the SO₂ monitoring network; however, the Port Arthur 7th Street air monitoring station was relocated to a temporary location on July 23, 2019, due to property owner construction, and to a final location on December 13, 2019, with a new name, Port Arthur West 7th Street Gate 2. The new site was selected based on modeling conducted with updated facility operations and emissions. The EPA approved of the relocation in a letter dated August 23, 2019. The TCEQ Austin Northwest SO₂ monitor was temporarily shut down on February 18, 2020, due to property owner construction. The air monitoring station and SO₂ monitor will be permanently relocated approximately 0.10 miles to Austin North Hills Drive by June 30, 2020, approved by the EPA in a letter dated April 10, 2020.

Regulatory SO₂ Monitoring Network Changes

The TCEQ recommends decommissioning the Baytown Garth SO₂ monitor by December 31, 2020. To meet federal requirements, the TCEQ must operate a minimum of three SO₂ monitors in the Houston CBSA and currently operates five. The Baytown Garth SO₂ monitor data trends are among the lowest in the CBSA with a 2018 design value of 6 ppb, 8 percent (%) of the NAAQS. Air monitoring for SO₂ will continue in the Houston CBSA with four monitors; monitors are sited along the Houston ship channel and in residential areas southeast and southwest of city center. The Baytown Garth site will continue to monitor for other pollutants as listed in AMNP Appendix B. The TCEQ recommends changing the Houston Croquet SO₂ monitor network designation from SPM to SLAMS to meet area PWEI requirements by January 1, 2021, and the Corsicana Airport SO₂ monitor from state initiative to federal SPM, effective January 1, 2021. Data from the Corsicana Airport monitor are currently submitted to the EPA Air Quality System database to support modeling and regional data analyses. The TCEQ Rockdale

John D. Harper SO₂ monitor (and entire site) will be decommissioned by July 2020 due to sale/lease of the property. Per 40 CFR §51.1203(c)(3), this monitor is eligible for decommission based on a preliminary design value less than 50% of the 2010 SO₂ NAAQS from data collected during the first three-year period of operation. The facility requiring DRR SO₂ air quality characterization was shut down in 2017.

Lead

The TCEQ total suspended particulate (TSP) lead (Pb) network is designed to meet source-oriented SLAMS monitoring requirements. The TCEQ Pb monitoring network is required to operate three Pb monitors and exceeds this requirement with five monitors. AMNP Appendix G lists the Pb monitoring requirements and the total number of TSP Pb monitors. AMNP Appendix B lists the air monitoring sites where Pb is measured.

Monitoring Requirements

The TCEQ Pb network meets 40 CFR §58, Appendix D, Section 4.5 monitoring requirements. This section requires state agencies to conduct ambient air Pb monitoring near Pb sources that have been shown or are expected to contribute to a maximum ambient air Pb concentration in excess of the standard. Title 40 CFR §58, Appendix D, Section 4.5(a) requires a minimum of one source-oriented ambient air Pb monitoring site to measure maximum concentrations near each non-airport facility emitting 0.50 tpy or more of Pb annually, based on either the most recent NEI data or annual EI data submitted to meet state reporting requirements.

The TCEQ evaluated the 2016, 2017, and 2018 point source EI data. All sources continue to maintain emissions below the 0.50 tpy threshold, except for the Lower Colorado River Authority Fayette Power Plant discussed below. Table 2 includes information regarding Pb source-oriented monitoring.

Table 2: 2016-2018 Lead Point Source Emissions Inventory Data

Facility Name	County	2016 Pb Emissions (tpy)	2017 Pb Emissions (tpy)	2018 Pb Emissions (tpy)	TCEQ Comments
Lower Colorado River Authority	Fayette	0.5580	0.6300	0.5793	Pb waiver renewal approved on October 26, 2015
Conesus, LLC	Kaufman	0.3401	0.2617	0.2812	Pb is currently monitored at the Terrell Temtex site

LLC - limited liability company

Pb - lead

TCEQ - Texas Commission on Environmental Quality

tpy - tons per year

Pb Waivers

Under 40 CFR §58, Appendix D, Section 4.5(a)(ii), the EPA Regional Administrator may waive the requirement in 40 CFR §58, Appendix D, 4.5(a) for monitoring near specific Pb sources with sufficient demonstration that the Pb source will not contribute to a maximum concentration in ambient air greater than 50% of the NAAQS based on historical monitoring data, modeling, or other approved means. All approved waivers

must be renewed every five years as part of the network assessment required under 40 CFR §58.10(d).

Since 2010, the TCEQ has submitted five Pb waivers for source-oriented monitoring. The EPA Region 6 granted each request. Four of the waivers are no longer required due to a decrease in source emissions below the 0.50 tpy threshold. The remaining Pb waiver remains effective. The request to renew the Pb waiver for the Lower Colorado River Authority Fayette Power Plant in Fayette County was submitted in the 2015 TCEQ *Texas Five-Year Ambient Monitoring Network Assessment*. The waiver renewal request included information regarding a Pb modeling analysis indicating the predicted maximum ground level concentration for a rolling three-month average continued to remain below 50% of the NAAQS. The EPA Region 6 approved the waiver renewal request in the TCEQ *2015 Annual Monitoring Network Plan* response letter dated October 26, 2015. Applicable waivers will be submitted for renewal in the 2020 TCEQ *Texas Five-Year Ambient Monitoring Network Assessment*.

Collocation Requirements

Title 40 CFR §58, Appendix A, Section 3.4.4 requires a primary quality assurance organization to select 15% of the Pb monitoring sites within the network for collocated quality control (QC) monitoring, with the first of these monitors measuring the highest Pb concentrations in the network. Based on the current network of primary Pb monitors, the TCEQ is required to maintain one collocated QC Pb monitor. The TCEQ operates collocated QC Pb monitors at Frisco Eubanks and Terrell Temtex. Terrell Temtex measured the highest 2018 network Pb concentrations.

Previously Recommended Changes

The TCEQ 2019 AMNP recommended reducing the sampling frequency of the Frisco Eubanks collocated QC Pb monitor to every 12th day. The EPA approved the request in a letter dated November 4, 2019, and the change was effective November 17, 2019.

Regulatory Pb Monitoring Network Changes

The TCEQ recommends decommissioning the TSP Pb monitors at El Paso UTEP and Ojo De Agua by December 31, 2020. The total 2018 El Paso County point source lead emissions of 0.06 tpy are well below the Pb monitoring threshold federal requirement of 0.50 tpy, and no single source in the area indicates the need for continued monitoring. The El Paso UTEP and Ojo De Agua monitors three-month rolling average design values are 0.02 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and 0.00 $\mu\text{g}/\text{m}^3$, respectively, based on the most recent 38-months data. El Paso UTEP and Ojo De Agua will continue monitoring for other pollutants as listed in AMNP Appendix B.

Ozone

The TCEQ ozone (O_3) network is designed to meet SLAMS, PAMS, and NCore monitoring requirements. The TCEQ O_3 monitoring network is required to operate a total of 27 O_3 monitors and exceeds this requirement with 70 O_3 monitors. AMNP Appendix H lists the O_3 requirements and monitors in each MSA in the state. AMNP Appendix B lists the air monitoring sites where O_3 is measured.

Monitoring Requirements

SLAMS Requirements

Title 40 CFR §58, Appendix D, Section 4.1, requires O₃ monitoring in each MSA with a population of 350,000 or more persons. Monitoring is also required in MSAs with lower populations if the design value for that MSA is equal to or greater than 85% of the NAAQS. Monitoring requirements are outlined in Table 3. According to 2018 U.S. Census Bureau population estimates and 2016-2018 eight-hour O₃ design values, the TCEQ must operate a minimum of 24 O₃ monitors to meet SLAMS network requirements. AMNP Appendix B lists the monitors in each MSA.

Table 3: Ozone Monitoring Requirements

MSA Population ¹	Most recent 3-year design value concentrations ≥85% of any O ₃ NAAQS ²	Most recent 3-year design value concentrations <85% of any O ₃ NAAQS ^{3, 4}
>10,000,000	4	2
4,000,000 to 10,000,000	3	1
350,000 to <4,000,000	2	1
50,000 to <350,000	1	0

¹Minimum monitoring requirements apply to the metropolitan statistical area (MSA).

²The ozone (O₃) National Ambient Air Quality Standards (NAAQS) levels are defined in 40 CFR §50.

³These minimum monitoring requirements apply in the absence of a design value.

⁴MSA must contain an urbanized area of 50,000 or more population.

≥ - greater than or equal to

< - less than

> - greater than

% - percent

NCore and PAMS Requirements

In addition to SLAMS O₃ requirements, 40 CFR §58, Appendix D, Sections 3 and 5, require O₃ monitoring at NCore sites to meet NCore design criteria, and at NCore sites in CBSAs with a population of 1,000,000 or more persons to meet PAMS requirements. The TCEQ meets combined NCore and PAMS requirements with O₃ monitors at the three NCore sites listed in Table 1.

Previously Recommended Changes

The TCEQ 2019 AMNP recommended deploying O₃ SPM monitors to the Ojo De Agua air monitoring site and the new Houston West End site, named Houston Harvard Street. Both monitors are expected to be operational soon. The TCEQ proposed changing the network designation for the O₃ monitor at Corsicana Airport from state initiative to a federal SPM and changing the O₃ monitors at Dallas North #2, Cleburne Airport, and Keller to PAMS. The EPA approved the requests in a letter dated November 4, 2019, and the network designation changes were effective January 1, 2020.

The TCEQ Austin Northwest O₃ monitor was temporarily shut down on February 18, 2020, due to property owner construction. The air monitoring station and O₃ monitor will be permanently relocated approximately 0.10 miles to Austin North Hills Drive by June 30, 2020, as approved by the EPA in a letter dated April 10, 2020.

Regulatory O₃ Monitoring Network Changes

The TCEQ evaluated the current O₃ monitoring network and determined the existing O₃ network meets all federal monitoring requirements; therefore, no changes are recommended.

Carbon Monoxide

The TCEQ carbon monoxide (CO) network includes ambient CO and high-sensitivity CO monitoring. The TCEQ CO network is designed to meet NCore and near-road monitoring requirements. The agency is required to operate seven CO monitors and exceeds the requirements with 12: eight CO monitors and four high-sensitivity CO monitors. AMNP Appendix I lists the required and current CO monitors in each CBSA. AMNP Appendix B lists the air monitoring sites where CO is measured.

Monitoring Requirements

NCore Monitoring Requirements

Title 40 CFR §58, Appendix D, Section 3 requires CO monitoring at NCore sites. The EPA's *Technical Assistance Document (TAD) for Precursor Gas Measurements in the NCore Multi-Pollutant Monitoring Network – Version 4* (September 2005) recommends high-sensitivity CO monitors at the NCore sites. The TCEQ meets this technical recommendation with high-sensitivity CO monitors at the three NCore sites listed in Table 1.

Near-Road Monitoring Requirements

Title 40 CFR §58, Appendix D, Section 4.2 requires collocating one CO monitor with one required near-road NO₂ monitor in CBSAs with populations of 1,000,000 or more persons. The TCEQ meets this requirement with CO monitors at the following near-road sites.

- DFW CBSA: Fort Worth California Parkway North
- Houston CBSA: Houston North Loop
- San Antonio CBSA: San Antonio Interstate 35
- Austin CBSA: Austin North Interstate 35

Previously Recommended Changes

The TCEQ 2019 AMNP recommended replacing the San Antonio Interstate 35 CO monitor with a high-sensitivity CO monitor. The EPA approved this request in a letter dated November 4, 2019. This monitor is expected to be operational soon.

Regulatory CO Monitoring Network Changes

The TCEQ evaluated the current CO monitoring network and determined the existing CO network meets all federal monitoring requirements; therefore, no changes are recommended.

Particulate Matter of 10 Micrometers or Less

The TCEQ particulate matter of 10 micrometers or less in diameter (PM₁₀) network is designed to meet SLAMS monitoring requirements based on MSA populations. The TCEQ is required to operate between 11 and 31 PM₁₀ monitors and exceeds the minimum requirements with 21 monitors. AMNP Appendix J lists the required and current PM₁₀ monitors in each MSA. AMNP Appendix B lists the air monitoring sites where PM₁₀ is measured.

Monitoring Requirements

The TCEQ PM₁₀ network is designed to meet the area requirements of 40 CFR §58, Appendix D, Section 4.6, specifying the number of PM₁₀ monitors required in MSAs based on population and available measured concentrations. Monitoring requirements are listed in Table 4. Compliance with the PM₁₀ standard is based on the number of measured exceedances of the 150 µg/m³ standard averaged over three years. The evaluation of PM₁₀ monitoring requirements was completed using 2018 U.S. Census Bureau population estimates and 2016-2018 PM₁₀ data. The evaluation and the associated maximum 2016-2018 concentrations for each MSA are listed in AMNP Appendix J, Table 1.

Table 4: Particulate Matter of 10 Micrometers or Less Minimum Monitoring Requirements

Population Category	High Concentration ¹	Medium Concentration ²	Low Concentration ³
>1,000,000	6-10	4-8	2-4
500,000 to 1,000,000	4-8	2-4	1-2
250,000 to 500,000	3-4	1-2	0-1
100,000 to 250,000	1-2	0-1	0

¹High Concentration areas are those for which ambient PM₁₀ data show ambient concentrations exceeding the PM₁₀ National Ambient Air Quality Standards (NAAQS) by 20 percent or more.

²Medium Concentration areas are those for which ambient PM₁₀ data show ambient concentrations exceeding 80 percent of the PM₁₀ NAAQS.

³Low Concentration areas are those for which ambient PM₁₀ data show ambient concentrations less than 80 percent of the PM₁₀ NAAQS.

PM₁₀ - particulate matter of 10 micrometers or less in diameter

> - greater than

Collocation Requirements

Title 40 CFR §58, Appendix A, Section 3.3.4 requires a primary quality assurance organization to select 15% of the PM₁₀ monitoring sites within the network for collocated QC sampling. At least 50% of the selected sites should have an annual mean particulate matter concentration among the highest in the network. AMNP Appendix J, Table 2 lists the maximum concentration measurement during the three-year period from 2016-2018 and includes the 2016, 2017, and 2018 annual mean concentrations for each PM₁₀ site. The TCEQ evaluates the PM₁₀ concentration data annually to ensure the PM₁₀ collocated QC monitors continue to meet 40 CFR §58, Appendix A, Section 3.3.4.2. Based on the current network of PM₁₀ samplers, the TCEQ is required to operate three PM₁₀ collocated QC samplers and exceeds this requirement with four samplers. AMNP Appendix J, Table 1 lists the current collocated QC monitors.

The PM₁₀ annual measured average concentration data were evaluated from 2016-2018 to determine network QC collocation sites. The PM₁₀ measurement concentrations at Clinton, Socorro Hueco, and Ojo De Agua had 2018 annual mean concentrations among the highest in the network and continue to satisfy collocation QC requirements.

Previously Recommended Changes

The TCEQ 2019 AMNP recommended several PM₁₀ changes that were approved by the EPA in a letter dated November 4, 2019. The TCEQ reduced the sampling frequency of collocated QC PM₁₀ monitors at Clinton, Convention Center, Ojo De Agua, and Socorro Hueco to every 12th day, effective December 6, 2019. The TCEQ recommended adding a PM₁₀ continuous federal equivalent method (FEM) monitor to Houston North Wayside by December 31, 2020. This monitor is expected to be operational soon.

As approved by the EPA in a letter dated August 1, 2018, the Riverside PM₁₀ federal reference method (FRM) sampler was relocated to the El Paso Mimosa site, less than one mile from the original site, on December 17, 2019. The TCEQ relocated the Selma PM₁₀ FRM monitor to the new San Antonio Bulverde Parkway site with a new site identification number on November 19, 2019, as approved by the EPA in a letter dated March 29, 2019. The Selma monitor and site were decommissioned on December 9, 2019.

The TCEQ will deploy a PM₁₀ FRM sampler to the Dallas County southern sector industrial corridor by December 31, 2020. The new Dallas County southern sector air monitoring site will provide improved spatial coverage and air quality information.

Due to industrial and population growth in the Gregory-Portland area north of Corpus Christi, the TCEQ Monitoring Division, Toxicology Division, Air Quality Division, and TCEQ Corpus Christi Regional Office continue to evaluate the potential placement of PM₁₀ monitors in San Patricio County, as previously recommended in the 2019 AMNP.

Regulatory PM₁₀ Monitoring Network Changes

The TCEQ recommends decommissioning the Houston Westhollow PM₁₀ FRM non-continuous sampler and replacing it with a continuous fine particulate matter monitor, as noted in the subsequent section, by December 31, 2020. This PM₁₀ monitor had a 2018 annual average concentration <65% of the NAAQS and the Houston MSA will continue to have PM₁₀ spatial coverage with four monitors. The particulate matter sampler resource reallocation allows the TCEQ to provide fine particulate matter data in west Houston.

The TCEQ recommends decommissioning the Edinburg East Freddy Gonzales Drive PM₁₀ FRM sampler by December 31, 2020. This PM₁₀ monitor had a 2018 annual average concentration <60% of the NAAQS. The McAllen-Mission-Edinburg MSA will continue to have PM₁₀ spatial coverage with a monitor at Mission; PM₁₀ data from Edinburg East Freddy Gonzales Drive and Mission correlate well.

Particulate Matter of 2.5 Micrometers or Less

The TCEQ particulate matter of 2.5 micrometers or less in diameter (PM_{2.5}) monitoring network includes a combination of non-continuous FRM, continuous FEM, and non-NAAQS comparable monitors designed to meet area, regional background, regional transport, NCore, and near-road network requirements. The TCEQ is required to operate 28 FRM, FEM, coarse particulate matter (PM_{10-2.5}), or speciated PM_{2.5} monitors and exceeds the requirements with 68 monitors. An analysis of PM_{2.5} monitoring and siting requirements using the most recent 2018 U.S. Census Bureau population estimates and 2018 PM_{2.5} design values is provided in AMNP Appendix K. AMNP Appendix B lists the air monitoring sites where PM_{2.5} is measured.

Monitoring Requirements

General and Continuous Monitoring Requirements

Title 40 CFR §58, Appendix D, Section 4.7 requires PM_{2.5} monitoring in MSAs with populations of 500,000 or more persons and in MSAs with lower populations if measured PM_{2.5} design values for an MSA equal or exceed 85% of the NAAQS. Monitoring requirements are outlined in Table 5. Under 40 CFR §58, Appendix D, Section 4.7.2, the TCEQ must operate continuous PM_{2.5} monitors equal to at least one-

half the required number of SLAMS-required sites. At least one of these required continuous analyzers in each MSA must be collocated with one of the required FRM/FEM monitors unless the FEM monitor is itself a continuous FEM monitor. Additionally, 40 CFR §58, Appendix D, Section 4.7.3 requires each state to install and operate at least one PM_{2.5} site to monitor for regional background and at least one PM_{2.5} site to monitor regional transport. AMNP Appendix B lists monitors meeting the regional background and transport requirements.

Table 5: Particulate Matter of 2.5 Micrometers or Less Minimum Monitoring Requirements

MSA population	Most recent 3-year design value \geq 85% of any PM _{2.5} NAAQS	Most recent 3-year design value <85% of any PM _{2.5} NAAQS
>1,000,000	3	2
500,000 to 1,000,000	2	1
50,000 to <500,000	1	0

< - less than

> - greater than

\geq - greater than or equal to

% - percent

MSA - metropolitan statistical area

NAAQS - National Ambient Air Quality Standards

PM_{2.5} - particulate matter of 2.5 micrometers or less in diameter

NCORE Monitoring Requirements

Title 40 CFR §58, Appendix D, Section 3 requires PM_{2.5} FRM mass, PM_{2.5} FEM mass continuous, speciated PM_{2.5}, and PM_{10-2.5} mass monitoring at all NCORE sites. The TCEQ meets this requirement with PM_{2.5} monitors at the three NCORE sites listed in Table 1.

Near-Road PM_{2.5} Monitoring Requirements

Title 40 CFR §58, Appendix D, Section 4.7.1(b)(2) requires collocating one FRM or FEM PM_{2.5} monitor with one required near-road NO₂ monitor in CBSAs with populations of 1,000,000 or more persons. The TCEQ meets this requirement with PM_{2.5} monitors at the near-road sites listed below.

- DFW CBSA: Fort Worth California Parkway North
- Houston CBSA: Houston North Loop
- San Antonio CBSA: San Antonio Interstate 35
- Austin CBSA: Austin North Interstate 35

Collocation Requirements

Title 40 CFR §58, Appendix A, Section 3.2.3 requires a primary quality assurance organization to select 15% of the PM_{2.5} primary monitors of each method designation (FRM or FEM) for collocated QC sampling. For each primary monitor designated as an FEM, 50% of the monitors designated for collocation shall be collocated with an FRM and 50% shall be collocated with a monitor having the same method designation as the FEM primary monitor (see Table 6). Fifty percent of the collocated QC monitors must be deployed at sites with annual average or daily concentrations estimated to be within plus or minus 20% of either the annual or 24-hour standard. Based on the current network of PM_{2.5} FRM monitors, the TCEQ is required to operate two collocated PM_{2.5} FRM (FRM/FRM collocation) monitors and meets this requirement with two monitors.

To replace aging PM_{2.5} equipment, the TCEQ began deploying PM_{2.5} continuous FEM monitors (method code 209) in 2017. Based on the current PM_{2.5} network of 30 FEM monitors, the TCEQ is required to operate five collocated QC monitors pursuant to 40 CFR §58, Appendix A, Section 3.2.3.2(b). For the first collocation requirement, a primary PM_{2.5} FEM monitor must be collocated with a PM_{2.5} FRM monitor (FEM/FRM collocation). The second pair must have a PM_{2.5} FEM monitor collocated with another PM_{2.5} FEM monitor (FEM/FEM collocation). The remaining collocated pair requirements alternate from FEM/FRM to FEM/FEM collocation.

The TCEQ operates five PM_{2.5} collocated QC monitor pairs, three PM_{2.5} FEM/FRM monitor pairs, and two PM_{2.5} FEM/FEM pairs. Information regarding the PM_{2.5} collocation designations is listed in AMNP Appendix B. A summary of current approved and proposed collocation deployments are listed in Table 6.

Table 6: Particulate Matter of 2.5 Micrometers or Less FEM Quality Control Collocation Requirements

Number of Primary FEM Monitors (with unique method designation)	Number Collocated	Number Collocated with an FRM	Number Collocated with same Method Designation	Collocation Site and Method Designations
1-9	1	1	0	Austin Webberville Road FEM/FRM
10-16	2	1	1	Corpus Christi Huisache FEM/FEM
17-23	3	2	1	San Antonio Northwest FEM/FRM
24-29	4	2	2	Fort Worth California Parkway North FEM/FEM
30-36	5	3	2	Houston Aldine FEM/FRM
37-43	6	3	3	Mission* (FEM/FEM)

*Future planned deployment as collocation thresholds are met

FEM - federal equivalent method

FRM - federal reference method

Previously Recommended Changes

The TCEQ 2019 AMNP recommended several PM_{2.5} changes that were approved by the EPA in a letter dated November 4, 2019. The El Paso Chamizal collocated QC PM_{2.5} FRM monitor was decommissioned on December 12, 2019. The non-NAAQS comparable Houston Deer Park #2 PM_{2.5} continuous tapered element oscillating microbalance (TEOM) sampler was decommissioned on December 6, 2019. The TCEQ deployed a PM_{2.5} FEM monitor to Bryan Finfeather Road, on February 27, 2020 to expand network coverage in the College Station-Bryan MSA. The TCEQ discontinued the Houston Aldine PM_{2.5} speciation on December 18, 2019. Reallocation of this PM_{2.5} speciation monitor to the Clinton Drive site is expected to be operational soon. The TCEQ non-NAAQS

comparable PM_{2.5} TEOM continuous monitor deployment to Houston North Wayside is expected to be operational soon.

The recommendation to relocate the Ascarate Park SE non-NAAQS comparable PM_{2.5} TEOM to Ojo De Agua was not approved by the EPA. Air monitoring objectives require networks to be designed to provide information about peak air pollution levels in an area. Networks must include monitoring sites located to determine the highest concentration expected to occur in the areas covered by the network per 40 CFR §58, Appendix D Section 1.1.1. The Ojo De Agua PM_{2.5} TEOM historically reflects the highest concentration for the El Paso area; therefore, the recommendation was not implemented.

As approved by the EPA in a letter dated March 20, 2019, the TCEQ relocated the Isla Blanca Park PM_{2.5} non-NAAQS comparable monitor to the Isla Blanca State Park Road site as a PM_{2.5} FEM continuous monitor, less than one mile from the original site, on October 7, 2019. As approved by the EPA in a letter dated January 15, 2020, the TCEQ recommended to relocate the San Antonio Palo Alto PM_{2.5} continuous monitor to the new Von Ormy Highway 16 site, the monitor is expected to be operational soon.

The TCEQ Austin Northwest PM_{2.5} monitor was temporarily shut down on February 18, 2020, due to property owner construction. The air monitoring station and PM_{2.5} monitor will be permanently relocated approximately 0.10 miles to Austin North Hills Drive by June 30, 2020, as approved by the EPA in a letter dated April 10, 2020. The TCEQ will deploy a PM_{2.5} non-NAAQS comparable monitor to the Dallas County southern sector industrial corridor by December 31, 2020. The Dallas County southern sector air monitoring site will provide improved spatial coverage and air quality information.

The TCEQ continues to replace aging PM_{2.5} FRM non-continuous monitors and non-NAAQS comparable PM_{2.5} continuous monitors (PM_{2.5} TEOMs) with PM_{2.5} FEM continuous monitors as indicated and approved in the 2018 and 2019 AMNPs. The approved changes status is listed in Table 7.

Table 7: Particulate Matter of 2.5 Micrometers or Less Summary of Approved Changes

Site Name	Monitor(s) Replaced	New Monitor	Action	Status
Bryan Finfeather Road	None - new area monitor	PM _{2.5} FEM continuous	Deploy	Completed February 27, 2020
Denton Airport South	PM _{2.5} TEOM	PM _{2.5} FEM continuous	Method code change	Completed July 30, 2019
El Paso Chamizal	PM _{2.5} FRM collocated QC	PM _{2.5} FRM QC collocated	Decommission	Completed December 12, 2019
Isla Blanca State Park Road	PM _{2.5} TEOM	PM _{2.5} TEOM	Site relocation	Completed October 7, 2019
Fort Worth California Parkway North	PM _{2.5} FRM	PM _{2.5} FEM continuous collocated pair	Method code change, new FEM/FEM collocation pair	Completed July 31, 2019

Site Name	Monitor(s) Replaced	New Monitor	Action	Status
Fort Worth Northwest	PM _{2.5} FRM	PM _{2.5} FEM continuous	Method code change	Completed July 31, 2019
Haws Athletic Center	PM _{2.5} FRM and PM _{2.5} TEOM pair	PM _{2.5} FEM continuous	Method code change	Completed December 4, 2019
Houston Aldine	PM _{2.5} speciation	Decommission and relocate to Clinton	Decommission	Completed December 18, 2019
Austin Northwest	PM _{2.5} TEOM	Replace with PM _{2.5} FEM continuous	Method code change	Pending new site deployment
Clinton	PM _{2.5} speciation	Deploy	Deploy	Pending
Conroe Relocated	PM _{2.5} TEOM	PM _{2.5} FEM continuous	Method code change	Pending
Convention Center	PM _{2.5} FRM	PM _{2.5} FEM continuous	Method code change	Pending
Corsicana Airport	PM _{2.5} TEOM	PM _{2.5} FEM continuous	Method code change	Pending
Dallas County southern sector	None – new area monitor	PM _{2.5} TEOM	Deploy	Pending
Edinburg East Freddy Gonzalez	PM _{2.5} FRM	Replace with PM _{2.5} FEM continuous	Method code change	Pending
El Paso UTEP	PM _{2.5} FRM and PM _{2.5} TEOM pair	Replace with PM _{2.5} FEM continuous	Method code change	Pending
Houston North Loop	PM _{2.5} FRM	PM _{2.5} FEM continuous	Method code change	Pending
Houston North Wayside	None – new site monitor	PM _{2.5} TEOM	Deploy	Pending
Karnack	PM _{2.5} FRM and PM _{2.5} TEOM pair	Replace with PM _{2.5} FEM continuous	Method code change	Pending
Kaufman	PM _{2.5} TEOM	PM _{2.5} FEM continuous	Method code change	Pending
Palo Alto to Von Ormy Highway 16	PM _{2.5} TEOM	PM _{2.5} continuous	Decommission and relocate site	Pending
Seabrook Friendship Park	PM _{2.5} TEOM	PM _{2.5} FEM continuous	Method code change	Pending

Site Name	Monitor(s) Replaced	New Monitor	Action	Status
Socorro Hueco	PM _{2.5} TEOM	Replace with PM _{2.5} FEM continuous	Method code change	Pending

FEM - federal equivalent method

FRM - federal reference method

NA - not applicable

PM_{2.5} - particulate matter of 2.5 micrometers or less in diameter

QC - quality control

TEOM - tapered element oscillating microbalance

UTEP - University of Texas at El Paso

Regulatory PM_{2.5} Monitoring Network Changes

The TCEQ recommends decreasing the Clinton and Houston Aldine collocated QC PM_{2.5} FRM monitor's sampling frequency to 1-in-12 days, by December 31, 2020, as allowed by federal requirements. The TCEQ recommends aligning the Dona Park PM_{2.5} speciation network affiliation from Chemical Speciation Network for Supplemental Speciation Stations to SPM, reflecting current data usage, by January 1, 2021. The TCEQ recommends deploying a PM_{2.5} FEM continuous monitor to Houston Westhollow providing improved spatial coverage for west Houston by December 31, 2020.

The TCEQ continues to replace aging PM_{2.5} non-NAAQS comparable equipment with new FEM technology to provide continuous NAAQS comparable data to the public that is suitable for Air Quality Index reporting and the EPA's AirNow webpage. The increase in NAAQS equivalent monitors optimizes the monitoring resources in affected MSAs. The TCEQ proposes to replace non-NAAQS comparable PM_{2.5} continuous monitors (PM_{2.5} TEOM) with PM_{2.5} FEM continuous monitors by December 31, 2021, as listed in Table 8.

Table 8: Particulate Matter of 2.5 Micrometers or Less Recommendations and Method Code Changes

Site Name	Monitor to Change	Description	Current Method Code(s)	New Method Code	Estimated Date
Houston Westhollow	PM ₁₀	Replace with PM _{2.5} FEM continuous	NA	209	December 31, 2020
Ascarate Park Southeast	PM _{2.5} TEOM	Replace with PM _{2.5} FEM continuous	702*	209	December 31, 2021
Clinton	PM _{2.5} TEOM	Replace with PM _{2.5} FEM continuous	702*	209	December 31, 2021
Dona Park	PM _{2.5} TEOM	Replace with PM _{2.5} FEM continuous	702*	209	December 31, 2021
Midlothian OFW	PM _{2.5} TEOM	Replace with PM _{2.5} FEM continuous	702*	209	December 31, 2021

* - non-NAAQS comparable monitor

FEM - federal equivalent method

NA - not applicable

PM_{2.5} - particulate matter of 2.5 micrometers or less in diameterPM₁₀ - particulate matter of 10 micrometers or less in diameter

TEOM - tapered element oscillating microbalance

Volatile Organic Compounds

The TCEQ volatile organic compound (VOC) network is designed to meet PAMS requirements. The TCEQ is required to operate two VOC monitors and exceeds this requirement with 12 monitors. The TCEQ VOC network includes eight automated gas chromatograph (autoGC) continuous monitors and four non-continuous canister samplers. AMNP Appendix L, Table 1 lists the required and current VOC monitors in each Texas CBSA. AMNP Appendix B lists the air monitoring sites where VOCs are measured.

Monitoring Requirements

Title 40 CFR §58, Appendix D, Section 5 requires state agencies to collect hourly averaged speciated VOC data at NCore sites located in CBSAs with a population of 1,000,000 or more persons as part of the PAMS network requirements. The TCEQ exceeds VOC monitoring requirements with autoGCs at the three NCore sites listed in Table 1.

Previously Recommended Changes

The TCEQ 2019 AMNP recommended no changes to the VOC monitoring network.

Regulatory VOC Monitoring Network Changes

The TCEQ evaluated the current VOC monitoring network and determined the existing VOC network meets all federal monitoring requirements; therefore, no changes are recommended.

Carbonyls

The TCEQ carbonyl monitoring network is designed to meet PAMS requirements. The TCEQ is required to operate two carbonyl monitors and exceeds this requirement with four monitors. AMNP Appendix L, Table 2 lists the required and current carbonyl monitors in each Texas CBSA. AMNP Appendix B lists the air monitoring sites where carbonyls are measured.

Monitoring Requirements

Title 40 CFR §58, Appendix D, Section 5, requires state agencies to collect three eight-hour averaged carbonyl samples every third day at each NCore site located in a CBSA with a population of 1,000,000 or more persons. The TCEQ currently collects carbonyl samples at the NCore sites listed below.

- DFW CBSA: Dallas Hinton
- Houston CBSA: Houston Deer Park #2

Previously Recommended Changes

The TCEQ 2019 AMNP recommended changing the network designation for the Fort Worth Northwest carbonyl monitor to PAMS. The EPA approved this change in a letter dated November 4, 2019, and the network designation change was effective January 1, 2020.

Regulatory Carbonyl Monitoring Network Changes

The TCEQ evaluated the current carbonyl monitoring network and determined the existing carbonyl network meets all federal monitoring requirements; therefore, no changes are recommended.

Meteorology

The TCEQ meteorology monitoring network includes surface meteorology parameters (solar radiation, wind speed, wind direction, and temperature), upper air measurements (mixing height), and other meteorological parameters. Surface meteorology is measured at most air monitoring stations and additional meteorology parameters are required as PAMS measurements. All meteorology monitors in the TCEQ network are included in AMNP Appendix B.

Monitoring Requirements

Title 40 CFR §58, Appendix D, Section 5 requires state agencies to collect surface and upper air meteorology measurements at all NCore PAMS sites in CBSAs with a population of 1,000,000 or more persons. PAMS meteorology measurements include wind speed, wind direction, outdoor temperature, atmospheric pressure, relative humidity, precipitation, hourly averaged mixing-height, solar radiation, and ultraviolet radiation.

Previously Recommended Changes

The TCEQ 2019 AMNP recommended several meteorology changes that were approved by the EPA in a letter dated November 4, 2019. The Keller and Dallas North #2 wind speed, wind direction, outdoor temperature, and solar radiation monitors network designations were changed to PAMS on January 1, 2020. The TCEQ Corsicana Airport wind speed, wind direction, outdoor temperature, relative humidity, and dew point monitors were changed to federal SPM on January 1, 2020. The TCEQ Bryan Finfeather Road wind speed, wind direction, and outdoor temperature monitors were deployed on February 27, 2020. The TCEQ San Antonio Northwest ceilometer is pending deployment.

In addition to the changes recommended in the 2019 AMNP, the TCEQ deployed wind direction, wind speed, and outdoor temperature to the Terrell Temtex site on December 3, 2019. The Port Arthur 7th Street wind speed, wind direction, and outdoor temperature monitors were relocated to a temporary location on July 23, 2019, and to a final location on December 13, 2019, with a new name, Port Arthur West 7th Street Gate 2, as approved by the EPA in a letter dated August 23, 2019. The TCEQ Isla Blanca Park wind speed, wind direction, and outdoor temperature monitors were relocated to the new Isla Blanca State Park Road site on October 7, 2019, as approved by the EPA in a letter dated March 20, 2019. The TCEQ changed the Floresville Hospital Boulevard and Karnes County wind speed, wind direction, and outdoor temperature monitors from state initiative to federal SPM, effective January 1, 2020, to support modeling and regional data analyses, as approved by the EPA in a letter dated April 10, 2020.

The TCEQ Austin Northwest wind speed, wind direction, and outdoor temperature monitors were temporarily shut down on February 18, 2020, due to property owner construction. The air monitoring station and the meteorological monitors will be

relocated permanently approximately 0.10 miles to Austin North Hills Drive by June 30, 2020, as approved by the EPA in a letter dated April 10, 2020.

Regulatory Meteorology Monitoring Network Changes

The TCEQ proposes deploying wind speed, wind direction, and outdoor temperature to a second near-road monitoring station in the San Antonio MSA to meet the near-road requirement in CBSAs with 2,500,000 or more persons based on the latest available census figures by December 31, 2021. The TCEQ Rockdale John D. Harper wind speed, wind direction, and outdoor temperature monitors (and entire site) will be decommissioned by July 2020 due to sale/lease of the property.

Non-Regulatory Network Review

Semi-Volatile Organic Compounds

The TCEQ 2019 AMNP recommended to decommission the Socorro Hueco, Brownsville, and Mission SPM semi-volatile organic compound samplers. The EPA approved the recommendation in a letter dated November 4, 2019, and the monitors were decommissioned on September 1, 2019.

Conclusion

After consideration of the federal regulations, 2018 U.S. Census Bureau population data, and 2018 design values, the TCEQ will meet or exceed all monitoring requirements with the above-mentioned recommendations for the next calendar year.

Appendix A

2020 Summary of Proposed Network Changes

**Texas Commission on Environmental Quality
2020 Annual Monitoring Network Plan**



Appendix A: 2020 Summary of Proposed Network Changes

Air Monitoring Site Name	Proposed Action	Parameter(s)	Estimated Date
Austin Webberville	Waiver under 40 CFR §58, Appendix E, Section 10.1.1	Particulate matter	November 1, 2020
Nederland High School	Relocate site	All existing	December 31, 2021
San Antonio	Deploy second near-road site	NO _x , wind speed, wind direction, and outdoor temperature	December 31, 2021
El Paso UTEP	Decommission monitor	TSP Pb	December 31, 2020
Ojo De Agua	Decommission monitor	TSP Pb	December 31, 2020
Baytown Garth	Decommission monitor	SO ₂	December 31, 2020
Corsicana Airport	Change network designation from state initiative to federal SPM	SO ₂	January 1, 2021
Houston Croquet	Change network designation from SPM to SLAMS	SO ₂	January 1, 2021
Rockdale John D Harper Road	Decommission site	All existing	July 31, 2020
Edinburg East Freddy Gonzalez	Decommission monitor	PM ₁₀	December 31, 2020
Houston Westhollow	Decommission monitor	PM ₁₀	December 31, 2020
Houston Westhollow	Deploy SPM to existing site	PM _{2.5} continuous	December 31, 2020
Dona Park	Change network designation from CSN Supplemental to SPM	PM _{2.5} speciation	January 1, 2021
Ascarate Park Southeast	Replace non-NAAQS comparable monitor	PM _{2.5} FEM continuous	December 31, 2021

Appendix A: 2020 Summary of Proposed Network Changes

Air Monitoring Site Name	Proposed Action	Parameter(s)	Estimated Date
Clinton	Replace non-NAAQS comparable monitor	PM _{2.5} FEM continuous	December 31, 2021
Dona Park	Replace non-NAAQS comparable monitor	PM _{2.5} FEM continuous	December 31, 2021
Midlothian OFW	Replace non-NAAQS comparable monitor	PM _{2.5} FEM continuous	December 31, 2021
Clinton	Reduce sampling frequency to every 12 th day	PM _{2.5} QC collocated	December 31, 2020
Houston Aldine	Reduce sampling frequency to every 12 th day	PM _{2.5} QC collocated	December 31, 2020

AQS – EPA Air Quality System database

CSN – Chemical Speciation Network

EPA – United States Environmental Protection Agency

FEM – federal equivalent method

NAAQS – National Ambient Air Quality Standards

NO_x – oxides of nitrogen

PM₁₀ – particulate matter of 10 micrometers or less in diameter

PM_{2.5} – particulate matter of 2.5 micrometers or less in diameter

SPM – special purpose monitor

TSP Pb– total suspended particulate lead

UTEP – University of Texas at El Paso

Appendix B

Ambient Air Monitoring Network Site List

**Texas Commission on Environmental Quality
2020 Annual Monitoring Network Plan**



Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Amarillo, TX	483751025	Amarillo 24th Avenue	4205 NE 24th Avenue, Amarillo	35.236736	-101.787405	Suburban	SO2	SLAMS	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood
Amarillo, TX	483751025	Amarillo 24th Avenue	4205 NE 24th Avenue, Amarillo	35.236736	-101.787405	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Amarillo, TX	483751025	Amarillo 24th Avenue	4205 NE 24th Avenue, Amarillo	35.236736	-101.787405	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Amarillo, TX	483750320	Amarillo A&M	6500 Amarillo Blvd West, Amarillo	35.201592	-101.909275	Urban and Center City	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Population Exposure	Urban Scale
Amarillo, TX	483751077	Amarillo Xcel El Rancho	Folsom Rd. & El Rancho Rd., Amarillo	35.316500	-101.741800	Rural	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood
Amarillo, TX	483751077	Amarillo Xcel El Rancho	Folsom Rd. & El Rancho Rd., Amarillo	35.316500	-101.741800	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Amarillo, TX	483751077	Amarillo Xcel El Rancho	Folsom Rd. & El Rancho Rd., Amarillo	35.316500	-101.741800	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Austin-Round Rock, TX	484530020	Austin Audubon Society	12200 Lime Creek Rd, Leander	30.483168	-97.872301	Rural	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
Austin-Round Rock, TX	484530020	Austin Audubon Society	12200 Lime Creek Rd, Leander	30.483168	-97.872301	Rural	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Population Exposure	Neighborhood
Austin-Round Rock, TX	484530020	Austin Audubon Society	12200 Lime Creek Rd, Leander	30.483168	-97.872301	Rural	Solar Radiation	SPM	Photovoltaic	Continuous	Population Exposure	Urban Scale
Austin-Round Rock, TX	484530020	Austin Audubon Society	12200 Lime Creek Rd, Leander	30.483168	-97.872301	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Urban Scale
Austin-Round Rock, TX	484530020	Austin Audubon Society	12200 Lime Creek Rd, Leander	30.483168	-97.872301	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Urban Scale
Austin-Round Rock, TX	484531068	Austin North Interstate 35	8912 N IH 35 SVRD SB, Austin	30.353860	-97.691660	Urban and Center City	CO	Near-Road, SLAMS	Gas Filter Correlation	Continuous	Max Precursor Emissions Impact	Microscale
Austin-Round Rock, TX	484531068	Austin North Interstate 35	8912 N IH 35 SVRD SB, Austin	30.353860	-97.691660	Urban and Center City	NO/NO2/NOx	Near-Road, SLAMS	Chemi-luminescence	Continuous	Max Precursor Emissions Impact	Microscale
Austin-Round Rock, TX	484531068	Austin North Interstate 35	8912 N IH 35 SVRD SB, Austin	30.353860	-97.691660	Urban and Center City	PM2.5 (Beta)	Near-Road, SLAMS	Beta Attenuation	Continuous	Max Precursor Emissions Impact	Microscale
Austin-Round Rock, TX	484531068	Austin North Interstate 35	8912 N IH 35 SVRD SB, Austin	30.353860	-97.691660	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Max Precursor Emissions Impact	Microscale
Austin-Round Rock, TX	484531068	Austin North Interstate 35	8912 N IH 35 SVRD SB, Austin	30.353860	-97.691660	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Max Precursor Emissions Impact	Microscale

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Austin-Round Rock, TX	484530014	Austin Northwest	3724 North Hills Dr, Austin	30.354436	-97.760255	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
Austin-Round Rock, TX	484530014	Austin Northwest	3724 North Hills Dr, Austin	30.354436	-97.760255	Suburban	PM2.5 (TEOM)	SPM	TEOM Gravimetric	Continuous	Population Exposure	Neighborhood
Austin-Round Rock, TX	484530014	Austin Northwest	3724 North Hills Dr, Austin	30.354436	-97.760255	Suburban	SO2	SLAMS	Pulsed Fluorescence	Continuous	Population Exposure	Urban Scale
Austin-Round Rock, TX	484530014	Austin Northwest	3724 North Hills Dr, Austin	30.354436	-97.760255	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Austin-Round Rock, TX	484530014	Austin Northwest	3724 North Hills Dr, Austin	30.354436	-97.760255	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Austin-Round Rock, TX	484530014	Austin Northwest	3724 North Hills Dr, Austin	30.354436	-97.760255	Suburban	NO/NO2/NOx	SLAMS	Chemi-luminescence	Continuous	Population Exposure	Urban Scale
Austin-Round Rock, TX	484530021	Austin Webberville Rd	2600B Webberville Rd, Austin	30.263208	-97.712883	Urban and Center City	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Population Exposure	Neighborhood
Austin-Round Rock, TX	484530021	Austin Webberville Rd	2600B Webberville Rd, Austin	30.263208	-97.712883	Urban and Center City	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Population Exposure	Neighborhood
Austin-Round Rock, TX	484530021	Austin Webberville Rd	2600B Webberville Rd, Austin	30.263208	-97.712883	Urban and Center City	PM2.5 (FRM)	QA Collocated, SLAMS	Sequential FRM Gravimetric	24 Hours; 1/12 Days	Population Exposure	Neighborhood
Austin-Round Rock, TX	484530021	Austin Webberville Rd	2600B Webberville Rd, Austin	30.263208	-97.712883	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood
Austin-Round Rock, TX	484530021	Austin Webberville Rd	2600B Webberville Rd, Austin	30.263208	-97.712883	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
Beaumont-Port Arthur, TX	482450009	Beaumont Downtown	1086 Vermont Avenue, Beaumont	30.036422	-94.071061	Suburban	NO/NO2/NOx	PAMS, SLAMS	Chemi-luminescence	Continuous	Population Exposure	Neighborhood
Beaumont-Port Arthur, TX	482450009	Beaumont Downtown	1086 Vermont Avenue, Beaumont	30.036422	-94.071061	Suburban	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Beaumont-Port Arthur, TX	482450009	Beaumont Downtown	1086 Vermont Avenue, Beaumont	30.036422	-94.071061	Suburban	SO2	SLAMS	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood
Beaumont-Port Arthur, TX	482450009	Beaumont Downtown	1086 Vermont Avenue, Beaumont	30.036422	-94.071061	Suburban	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood
Beaumont-Port Arthur, TX	482450009	Beaumont Downtown	1086 Vermont Avenue, Beaumont	30.036422	-94.071061	Suburban	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Beaumont-Port Arthur, TX	482450009	Beaumont Downtown	1086 Vermont Avenue, Beaumont	30.036422	-94.071061	Suburban	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Max Precursor Emissions Impact	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Beaumont-Port Arthur, TX	482450009	Beaumont Downtown	1086 Vermont Avenue, Beaumont	30.036422	-94.071061	Suburban	TNMOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Beaumont-Port Arthur, TX	482450009	Beaumont Downtown	1086 Vermont Avenue, Beaumont	30.036422	-94.071061	Suburban	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Max Precursor Emissions Impact	Neighborhood
Beaumont-Port Arthur, TX	482450022	Hamshire	12552 Second St, Not In A City	29.863957	-94.317802	Suburban	NO/NO2/NOx	SLAMS	Chemi-luminescence	Continuous	General-Background; Regional Transport	Neighborhood, Urban Scale
Beaumont-Port Arthur, TX	482450022	Hamshire	12552 Second St, Not In A City	29.863957	-94.317802	Suburban	O3	SLAMS	UV Photometric	Continuous	General-Background; Regional Transport	Urban Scale
Beaumont-Port Arthur, TX	482450022	Hamshire	12552 Second St, Not In A City	29.863957	-94.317802	Suburban	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Population Exposure	Neighborhood
Beaumont-Port Arthur, TX	482450022	Hamshire	12552 Second St, Not In A City	29.863957	-94.317802	Suburban	Solar Radiation	SPM	Photovoltaic	Continuous	General-Background	Neighborhood
Beaumont-Port Arthur, TX	482450022	Hamshire	12552 Second St, Not In A City	29.863957	-94.317802	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Beaumont-Port Arthur, TX	482450022	Hamshire	12552 Second St, Not In A City	29.863957	-94.317802	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Beaumont-Port Arthur, TX	482450018	Jefferson County Airport	End of 90th Street @ Jefferson County Airport, Port Arthur	29.942798	-94.000770	Suburban	Precipitation	PAMS, SLAMS	Rain Gauge	Continuous	General-Background	Neighborhood
Beaumont-Port Arthur, TX	482450018	Jefferson County Airport	End of 90th Street @ Jefferson County Airport, Port Arthur	29.942798	-94.000770	Suburban	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	General-Background	Neighborhood
Beaumont-Port Arthur, TX	482450018	Jefferson County Airport	End of 90th Street @ Jefferson County Airport, Port Arthur	29.942798	-94.000770	Suburban	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Beaumont-Port Arthur, TX	482451035	Nederland High School	1800 N. 18th Street, Nederland	29.978926	-94.010872	Suburban	Barometric Pressure	PAMS, SLAMS	Barometric pressure transducer	Continuous	Max Precursor Emissions Impact	Neighborhood
Beaumont-Port Arthur, TX	482451035	Nederland High School	1800 N. 18th Street, Nederland	29.978926	-94.010872	Suburban	Dew Point	SPM	Derived at site	Continuous	Population Exposure	Neighborhood
Beaumont-Port Arthur, TX	482451035	Nederland High School	1800 N. 18th Street, Nederland	29.978926	-94.010872	Suburban	NO/NO2/NOx	PAMS, SLAMS	Chemi-luminescence	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Beaumont-Port Arthur, TX	482451035	Nederland High School	1800 N. 18th Street, Nederland	29.978926	-94.010872	Suburban	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Beaumont-Port Arthur, TX	482451035	Nederland High School	1800 N. 18th Street, Nederland	29.978926	-94.010872	Suburban	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Max Precursor Emissions Impact	Neighborhood
Beaumont-Port Arthur, TX	482451035	Nederland High School	1800 N. 18th Street, Nederland	29.978926	-94.010872	Suburban	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Beaumont-Port Arthur, TX	482451035	Nederland High School	1800 N. 18th Street, Nederland	29.978926	-94.010872	Suburban	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Beaumont-Port Arthur, TX	482451035	Nederland High School	1800 N. 18th Street, Nederland	29.978926	-94.010872	Suburban	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Max Precursor Emissions Impact	Neighborhood
Beaumont-Port Arthur, TX	482451035	Nederland High School	1800 N. 18th Street, Nederland	29.978926	-94.010872	Suburban	TNMOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Beaumont-Port Arthur, TX	482451035	Nederland High School	1800 N. 18th Street, Nederland	29.978926	-94.010872	Suburban	UV Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood
Beaumont-Port Arthur, TX	482451035	Nederland High School	1800 N. 18th Street, Nederland	29.978926	-94.010872	Suburban	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Max Precursor Emissions Impact	Neighborhood
Beaumont-Port Arthur, TX	483611083	Orange 1st Street	2239 1st Street, Orange	30.153675	-93.725897	Urban and Center City	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood
Beaumont-Port Arthur, TX	483611083	Orange 1st Street	2239 1st Street, Orange	30.153675	-93.725897	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Beaumont-Port Arthur, TX	483611083	Orange 1st Street	2239 1st Street, Orange	30.153675	-93.725897	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Beaumont-Port Arthur, TX	482450021	Port Arthur Memorial School	2200 Jefferson Drive, Port Arthur	29.922894	-93.909018	Suburban	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Population Exposure	Neighborhood
Beaumont-Port Arthur, TX	482450011	Port Arthur West	623 Ellias Street, Port Arthur	29.897516	-93.991084	Urban and Center City	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
Beaumont-Port Arthur, TX	482450011	Port Arthur West	623 Ellias Street, Port Arthur	29.897516	-93.991084	Urban and Center City	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood
Beaumont-Port Arthur, TX	482450011	Port Arthur West	623 Ellias Street, Port Arthur	29.897516	-93.991084	Urban and Center City	Solar Radiation	SPM	Photovoltaic	Continuous	Population Exposure; Source Oriented	Neighborhood
Beaumont-Port Arthur, TX	482450011	Port Arthur West	623 Ellias Street, Port Arthur	29.897516	-93.991084	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Source Oriented	Neighborhood
Beaumont-Port Arthur, TX	482450011	Port Arthur West	623 Ellias Street, Port Arthur	29.897516	-93.991084	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure; Source Oriented	Neighborhood
Beaumont-Port Arthur, TX	482451071	Port Arthur West 7th Street Gate 2	West 7th Street, Valero Port Arthur Gate 12, Port Arthur	29.844200	-93.965200	Rural	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood
Beaumont-Port Arthur, TX	482451071	Port Arthur West 7th Street Gate 2	West 7th Street, Valero Port Arthur Gate 12, Port Arthur	29.844200	-93.965200	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Beaumont-Port Arthur, TX	482451071	Port Arthur West 7th Street Gate 2	West 7th Street, Valero Port Arthur Gate 12, Port Arthur	29.844200	-93.965200	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Beaumont-Port Arthur, TX	482450101	SETRPC 40 Sabine Pass	5200 Mechanic, Not In A City	29.727931	-93.894081	Rural	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Ozone Concentration	Neighborhood
Beaumont-Port Arthur, TX	483611100	SETRPC 42 Mauriceville	Intersection of TX Hwys 62 & 12, Port Arthur	30.194558	-93.867237	Suburban	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Regional Transport; Upwind Background	Regional Scale
Beaumont-Port Arthur, TX	482450102	SETRPC 43 Jefferson Co Airport	Jefferson County Airport, Port Arthur	29.942751	-94.000684	Suburban	O3	SPM	UV Photometric	Continuous	Max Precursor Emissions Impact	Middle Scale
Beaumont-Port Arthur, TX	483611001	West Orange	2700 Austin Ave, West Orange	30.085263	-93.761341	Urban and Center City	NO/NO2/NOx	SLAMS	Chemi-luminescence	Continuous	Population Exposure	Neighborhood
Beaumont-Port Arthur, TX	483611001	West Orange	2700 Austin Ave, West Orange	30.085263	-93.761341	Urban and Center City	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
Beaumont-Port Arthur, TX	483611001	West Orange	2700 Austin Ave, West Orange	30.085263	-93.761341	Urban and Center City	Solar Radiation	SPM	Photovoltaic	Continuous	Source Oriented	Neighborhood
Beaumont-Port Arthur, TX	483611001	West Orange	2700 Austin Ave, West Orange	30.085263	-93.761341	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Source Oriented	Neighborhood
Beaumont-Port Arthur, TX	483611001	West Orange	2700 Austin Ave, West Orange	30.085263	-93.761341	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Source Oriented	Neighborhood
Big Spring***	482271072	Big Spring Midway	1218 N. Midway Rd, Big Spring	32.280278	-101.407222	Rural	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood
Big Spring***	482271072	Big Spring Midway	1218 N. Midway Rd, Big Spring	32.280278	-101.407222	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Big Spring***	482271072	Big Spring Midway	1218 N. Midway Rd, Big Spring	32.280278	-101.407222	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Borger***	482331073	Borger FM 1559	19440 FM 1559, Borger	35.676200	-101.440100	Rural	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood
Borger***	482331073	Borger FM 1559	19440 FM 1559, Borger	35.676200	-101.440100	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Borger***	482331073	Borger FM 1559	19440 FM 1559, Borger	35.676200	-101.440100	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Brownsville-Harlingen, TX	480610006	Brownsville	344 Porter Drive, Brownsville	25.892518	-97.493830	Urban and Center City	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Population Exposure	Regional Scale
Brownsville-Harlingen, TX	480610006	Brownsville	344 Porter Drive, Brownsville	25.892518	-97.493830	Urban and Center City	Solar Radiation	SPM	Photovoltaic	Continuous	Highest Concentration	Neighborhood
Brownsville-Harlingen, TX	480610006	Brownsville	344 Porter Drive, Brownsville	25.892518	-97.493830	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Urban Scale

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Brownsville-Harlingen, TX	480610006	Brownsville	344 Porter Drive, Brownsville	25.892518	-97.493830	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Highest Concentration	Neighborhood
Brownsville-Harlingen, TX	480611023	Harlingen Teege	1602 W Teege Avenue, Harlingen	26.200335	-97.712684	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
Brownsville-Harlingen, TX	480611023	Harlingen Teege	1602 W Teege Avenue, Harlingen	26.200335	-97.712684	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood
Brownsville-Harlingen, TX	480611023	Harlingen Teege	1602 W Teege Avenue, Harlingen	26.200335	-97.712684	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
Brownsville-Harlingen, TX	480612004	Isla Blanca State Park Road	Lot B 69 1/2, South Padre Island	26.071100	-97.157700	Rural	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Regional Transport	Urban Scale
Brownsville-Harlingen, TX	480612004	Isla Blanca State Park Road	Lot B 69 1/2, South Padre Island	26.071100	-97.157700	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Regional Transport	Regional Scale
Brownsville-Harlingen, TX	480612004	Isla Blanca State Park Road	Lot B 69 1/2, South Padre Island	26.071100	-97.157700	Rural	Wind (3m)	SPM	Potentiometer Cup Anemometer	Continuous	Regional Transport	Regional Scale
College Station-Bryan, TX	480411086	Bryan Finfeather Road	3670 Finfeather Road, Bryan	30.628333	-96.362778	Rural	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Population Exposure, Regional Transport	Neighborhood
College Station-Bryan, TX	480411086	Bryan Finfeather Road	3670 Finfeather Road	30.628333	-96.362778	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
College Station-Bryan, TX	480411086	Bryan Finfeather Road	3670 Finfeather Road	30.628333	-96.362778	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
College Station-Bryan, TX	483951076	Franklin Oak Grove	8127 Oak Grove Road, Franklin	31.168889	-96.481944	Rural	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood
College Station-Bryan, TX	483951076	Franklin Oak Grove	8127 Oak Grove Road, Franklin	31.168889	-96.481944	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
College Station-Bryan, TX	483951076	Franklin Oak Grove	8127 Oak Grove Road, Franklin	31.168889	-96.481944	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Corpus Christi, TX	483550032	Corpus Christi Huisache	3810 Huisache Street, Corpus Christi	27.804505	-97.431582	Urban and Center City	PM2.5 (Beta)	QA Collocated, SLAMS	Beta Attenuation	Continuous	Quality Assurance	Neighborhood
Corpus Christi, TX	483550032	Corpus Christi Huisache	3810 Huisache Street, Corpus Christi	27.804505	-97.431582	Urban and Center City	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Population Exposure	Neighborhood
Corpus Christi, TX	483550032	Corpus Christi Huisache	3810 Huisache Street, Corpus Christi	27.804505	-97.431582	Urban and Center City	SO2	SLAMS	Pulsed Fluorescence	Continuous	Highest Concentration; Population Exposure	Neighborhood
Corpus Christi, TX	483550032	Corpus Christi Huisache	3810 Huisache Street, Corpus Christi	27.804505	-97.431582	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Middle Scale

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Corpus Christi, TX	483550032	Corpus Christi Huisache	3810 Huisache Street, Corpus Christi	27.804505	-97.431582	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Middle Scale
Corpus Christi, TX	483550026	Corpus Christi Tuloso	9860 La Branch, Corpus Christi	27.832409	-97.555380	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
Corpus Christi, TX	483550026	Corpus Christi Tuloso	9860 La Branch, Corpus Christi	27.832409	-97.555380	Suburban	SO2	SLAMS	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood
Corpus Christi, TX	483550026	Corpus Christi Tuloso	9860 La Branch, Corpus Christi	27.832409	-97.555380	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Highest Concentration	Neighborhood
Corpus Christi, TX	483550026	Corpus Christi Tuloso	9860 La Branch, Corpus Christi	27.832409	-97.555380	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Highest Concentration	Neighborhood
Corpus Christi, TX	483550025	Corpus Christi West	Corpus Christi State School (Airport Rd), 902 AIRPORT BLVD, Corpus Christi	27.765340	-97.434262	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
Corpus Christi, TX	483550025	Corpus Christi West	Corpus Christi State School (Airport Rd), 902 AIRPORT BLVD, Corpus Christi	27.765340	-97.434262	Suburban	SO2	SLAMS	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood
Corpus Christi, TX	483550025	Corpus Christi West	Corpus Christi State School (Airport Rd), 902 AIRPORT BLVD, Corpus Christi	27.765340	-97.434262	Suburban	Solar Radiation	SPM	Photovoltaic	Continuous	Population Exposure	Neighborhood
Corpus Christi, TX	483550025	Corpus Christi West	Corpus Christi State School (Airport Rd), 902 AIRPORT BLVD, Corpus Christi	27.765340	-97.434262	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood
Corpus Christi, TX	483550025	Corpus Christi West	Corpus Christi State School (Airport Rd), 902 AIRPORT BLVD, Corpus Christi	27.765340	-97.434262	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
Corpus Christi, TX	483550034	Dona Park	5707 Up River Rd, Corpus Christi	27.811817	-97.465703	Urban and Center City	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Population Exposure	Neighborhood
Corpus Christi, TX	483550034	Dona Park	5707 Up River Rd, Corpus Christi	27.811817	-97.465703	Urban and Center City	PM2.5 (Speciation)	CSN Supplemental, SLAMS	Carbons, elements, ions	24 Hours; 1/6 Days	Population Exposure	Neighborhood
Corpus Christi, TX	483550034	Dona Park	5707 Up River Rd, Corpus Christi	27.811817	-97.465703	Urban and Center City	PM2.5 (TEOM)	SPM	TEOM Gravimetric	Continuous	Regional Transport	Neighborhood
Corpus Christi, TX	483550034	Dona Park	5707 Up River Rd, Corpus Christi	27.811817	-97.465703	Urban and Center City	PM2.5 Mass (Speciation)	CSN Supplemental, SLAMS	Sequential FRM Gravimetric	24 Hours; 1/6 Days	Population Exposure	Neighborhood
Corpus Christi, TX	483550034	Dona Park	5707 Up River Rd, Corpus Christi	27.811817	-97.465703	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Highest Concentration	Regional Scale
Corpus Christi, TX	483550034	Dona Park	5707 Up River Rd, Corpus Christi	27.811817	-97.465703	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Highest Concentration	Regional Scale

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Corsicana***	483491051	Corsicana Airport	Corsicana Airport, Corsicana	32.031934	-96.399141	Rural	Dew Point	SPM	Derived at site	Continuous	Source Oriented	Urban Scale
Corsicana***	483491051	Corsicana Airport	Corsicana Airport, Corsicana	32.031934	-96.399141	Rural	NO/NO2/NOx	SPM	Chemi-luminescence	Continuous	Source Oriented	Urban Scale
Corsicana***	483491051	Corsicana Airport	Corsicana Airport, Corsicana	32.031934	-96.399141	Rural	O3	SPM	UV Photometric	Continuous	Source Oriented	Urban Scale
Corsicana***	483491051	Corsicana Airport	Corsicana Airport, Corsicana	32.031934	-96.399141	Rural	PM2.5 (TEOM)	SPM	TEOM Gravimetric	Continuous	Source Oriented	Neighborhood
Corsicana***	483491051	Corsicana Airport	Corsicana Airport, Corsicana	32.031934	-96.399141	Rural	Relative Humidity	SPM	Humidity Sensor	Continuous	Source Oriented	Urban Scale
Corsicana***	483491051	Corsicana Airport	Corsicana Airport, Corsicana	32.031934	-96.399141	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Source Oriented	Urban Scale
Corsicana***	483491051	Corsicana Airport	Corsicana Airport, Corsicana	32.031934	-96.399141	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Source Oriented	Urban Scale
Corsicana***	483491081	Richland Southeast 1220 Road	Southeast 1220 Road, Richland	31.904100	-96.352000	Rural	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood
Corsicana***	483491081	Richland Southeast 1220 Road	Southeast 1220 Road, Richland	31.904100	-96.352000	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Corsicana***	483491081	Richland Southeast 1220 Road	Southeast 1220 Road, Richland	31.904100	-96.352000	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Dallas-Fort Worth-Arlington, TX	484393011	Arlington Municipal Airport	5504 South Collins Street, Arlington	32.656357	-97.088585	Suburban	NO/NO2/NOx	SLAMS	Chemi-luminescence	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	484393011	Arlington Municipal Airport	5504 South Collins Street, Arlington	32.656357	-97.088585	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	484393011	Arlington Municipal Airport	5504 South Collins Street, Arlington	32.656357	-97.088585	Suburban	Solar Radiation	SPM	Photovoltaic	Continuous	Highest Concentration	Neighborhood
Dallas-Fort Worth-Arlington, TX	484393011	Arlington Municipal Airport	5504 South Collins Street, Arlington	32.656357	-97.088585	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Highest Concentration	Neighborhood
Dallas-Fort Worth-Arlington, TX	484393011	Arlington Municipal Airport	5504 South Collins Street, Arlington	32.656357	-97.088585	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Highest Concentration	Neighborhood
Dallas-Fort Worth-Arlington, TX	482510003	Cleburne Airport	1650 Airport Drive, Cleburne	32.353595	-97.436742	Suburban	O3	PAMS, SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale
Dallas-Fort Worth-Arlington, TX	482510003	Cleburne Airport	1650 Airport Drive, Cleburne	32.353595	-97.436742	Suburban	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Highest Concentration	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Dallas-Fort Worth-Arlington, TX	482510003	Cleburne Airport	1650 Airport Drive, Cleburne	32.353595	-97.436742	Suburban	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Highest Concentration	Neighborhood
Dallas-Fort Worth-Arlington, TX	482510003	Cleburne Airport	1650 Airport Drive, Cleburne	32.353595	-97.436742	Suburban	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Highest Concentration	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130050	Convention Center	717 South Akard, Dallas	32.774262	-96.797686	Urban and Center City	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130050	Convention Center	717 South Akard, Dallas	32.774262	-96.797686	Urban and Center City	PM10 (FRM)	QA Collocated, SLAMS	HiVol Gravimetric	24 Hours; 1/12 Days	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130050	Convention Center	717 South Akard, Dallas	32.774262	-96.797686	Urban and Center City	PM2.5 (FRM)	SLAMS	Sequential FRM Gravimetric	24 Hours; 1/3 Days	Highest Concentration; Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130050	Convention Center	717 South Akard, Dallas	32.774262	-96.797686	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130050	Convention Center	717 South Akard, Dallas	32.774262	-96.797686	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	Barometric Pressure	PAMS, SLAMS	GC	Continuous	Max Precursor Emissions Impact	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	Carbonyl	PAMS, SLAMS	DNPH Silica HPLC	24 Hours; Seasonal, 8 Hour; Seasonal	Max Precursor Emissions Impact	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	CO (High Sensitivity)	NCORE, SLAMS	Gas Filter Correlation	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	Dew Point	SPM	Derived at site	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	NO2 (Direct)	PAMS, SLAMS	Direct-Read NO2	Continuous	Max Precursor Emissions Impact	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	NOy (High Sensitivity)	NCORE, PAMS, SLAMS	Chemi-luminescence	Continuous	Highest Concentration	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	O3	NCORE, PAMS, SLAMS	UV Photometric	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	PM10-2.5	NCORE, SLAMS	Beta Attenuation	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	PM2.5	NCORE, SLAMS	Beta Attenuation	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	PM2.5 (FRM)	QA Collocated, SLAMS	Sequential FRM Gravimetric	24 Hours; 1/12 Days	Population Exposure	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	PM2.5 (FRM)	NCORE, SLAMS	Sequential FRM Gravimetric	24 Hours; 1/3 Days	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	PM2.5 (Speciation)	CSN STN, NCORE, SLAMS	Carbons, elements, ions, sequential non-FRM gravimetric	24 Hours; 1/3 Days	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	Precipitation	PAMS, SLAMS	Rain Gauge	Continuous	Max Precursor Emissions Impact	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	Relative Humidity	NCORE, PAMS, SLAMS	Humidity Sensor	Continuous	Max Precursor Emissions Impact	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	SO2 (High Sensitivity)	NCORE, SLAMS	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Highest Concentration; Max Precursor Emissions Impact	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Max Precursor Emissions Impact	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	TNMOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Highest Concentration; Max Precursor Emissions Impact	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	UV Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	Visibility	SPM	Visibility Sensor	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130069	Dallas Hinton	1415 Hinton Street, Dallas	32.820061	-96.860117	Urban and Center City	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Max Precursor Emissions Impact	Neighborhood
Dallas-Fort Worth-Arlington, TX	481131067	Dallas LBJ Freeway	8652 LBJ Freeway, Dallas	32.921180	-96.753550	Urban and Center City	NO/NO2/NOx	Near-Road, SLAMS	Chemi-luminescence	Continuous	Max Precursor Emissions Impact	Microscale
Dallas-Fort Worth-Arlington, TX	481131067	Dallas LBJ Freeway	8652 LBJ Freeway, Dallas	32.921180	-96.753550	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Max Precursor Emissions Impact	Microscale
Dallas-Fort Worth-Arlington, TX	481131067	Dallas LBJ Freeway	8652 LBJ Freeway, Dallas	32.921180	-96.753550	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Max Precursor Emissions Impact	Microscale
Dallas-Fort Worth-Arlington, TX	481130075	Dallas North #2	12532 1/2 Nuestra Drive, Dallas	32.919206	-96.808498	Suburban	NO/NO2/NOx	PAMS, SLAMS	Chemi-luminescence	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130075	Dallas North #2	12532 1/2 Nuestra Drive, Dallas	32.919206	-96.808498	Suburban	O3	PAMS, SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Dallas-Fort Worth-Arlington, TX	481130075	Dallas North #2	12532 1/2 Nuestra Drive, Dallas	32.919206	-96.808498	Suburban	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	General-Background	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130075	Dallas North #2	12532 1/2 Nuestra Drive, Dallas	32.919206	-96.808498	Suburban	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	General-Background	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130075	Dallas North #2	12532 1/2 Nuestra Drive, Dallas	32.919206	-96.808498	Suburban	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130087	Dallas Redbird Airport Executive	3277 W Redbird Lane, Dallas	32.676451	-96.872060	Suburban	NO/NO2/NOx	SLAMS	Chemi-luminescence	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130087	Dallas Redbird Airport Executive	3277 W Redbird Lane, Dallas	32.676451	-96.872060	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale
Dallas-Fort Worth-Arlington, TX	481130087	Dallas Redbird Airport Executive	3277 W Redbird Lane, Dallas	32.676451	-96.872060	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Dallas-Fort Worth-Arlington, TX	481130087	Dallas Redbird Airport Executive	3277 W Redbird Lane, Dallas	32.676451	-96.872060	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Dallas-Fort Worth-Arlington, TX	481210034	Denton Airport South	Denton Airport South, Denton	33.219069	-97.196284	Rural	Dew Point	SPM	Derived at site	Continuous	Population Exposure	Urban Scale
Dallas-Fort Worth-Arlington, TX	481210034	Denton Airport South	Denton Airport South, Denton	33.219069	-97.196284	Rural	NO/NO2/NOx	PAMS, SLAMS	Chemi-luminescence	Continuous	Max Ozone Concentration; Population Exposure	Urban Scale
Dallas-Fort Worth-Arlington, TX	481210034	Denton Airport South	Denton Airport South, Denton	33.219069	-97.196284	Rural	NOy (High Sensitivity)	PAMS, SLAMS	Chemi-luminescence	Continuous	Max Ozone Concentration; Population Exposure	Urban Scale
Dallas-Fort Worth-Arlington, TX	481210034	Denton Airport South	Denton Airport South, Denton	33.219069	-97.196284	Rural	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Ozone Concentration; Population Exposure	Urban Scale
Dallas-Fort Worth-Arlington, TX	481210034	Denton Airport South	Denton Airport South, Denton	33.219069	-97.196284	Rural	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Population Exposure	Urban Scale
Dallas-Fort Worth-Arlington, TX	481210034	Denton Airport South	Denton Airport South, Denton	33.219069	-97.196284	Rural	Precipitation	PAMS, SLAMS	Rain Gauge	Continuous	Max Ozone Concentration	Urban Scale
Dallas-Fort Worth-Arlington, TX	481210034	Denton Airport South	Denton Airport South, Denton	33.219069	-97.196284	Rural	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Max Ozone Concentration	Urban Scale
Dallas-Fort Worth-Arlington, TX	481210034	Denton Airport South	Denton Airport South, Denton	33.219069	-97.196284	Rural	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Ozone Concentration	Urban Scale
Dallas-Fort Worth-Arlington, TX	481210034	Denton Airport South	Denton Airport South, Denton	33.219069	-97.196284	Rural	Speciated VOC (Canister)	PAMS, SLAMS	Canister GC-MS	24 Hours; 1/6 Days	Max Ozone Concentration; Population Exposure	Urban Scale
Dallas-Fort Worth-Arlington, TX	481210034	Denton Airport South	Denton Airport South, Denton	33.219069	-97.196284	Rural	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Max Ozone Concentration	Urban Scale

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Dallas-Fort Worth-Arlington, TX	481210034	Denton Airport South	Denton Airport South, Denton	33.219069	-97.196284	Rural	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Max Ozone Concentration	Urban Scale
Dallas-Fort Worth-Arlington, TX	484390074	Eagle Mountain Lake	14289 Morris Dido Newark Rd, Eagle Mountain	32.987891	-97.477175	Rural	NO/NO2/NOx	SPM	Chemi-luminescence	Continuous	Max Precursor Emission	Urban Scale
Dallas-Fort Worth-Arlington, TX	484390075	Eagle Mountain Lake	14290 Morris Dido Newark Rd, Eagle Mountain	32.987891	-97.477175	Rural	O3	SLAMS	UV Photometric	Continuous	Max Ozone Concentration	Neighborhood
Dallas-Fort Worth-Arlington, TX	484390075	Eagle Mountain Lake	14290 Morris Dido Newark Rd, Eagle Mountain	32.987891	-97.477175	Rural	Solar Radiation	SPM	Photovoltaic	Continuous	Highest Concentration	Middle Scale
Dallas-Fort Worth-Arlington, TX	484390075	Eagle Mountain Lake	14290 Morris Dido Newark Rd, Eagle Mountain	32.987891	-97.477175	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Highest Concentration	Middle Scale
Dallas-Fort Worth-Arlington, TX	484390075	Eagle Mountain Lake	14290 Morris Dido Newark Rd, Eagle Mountain	32.987891	-97.477175	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Highest Concentration	Middle Scale
Dallas-Fort Worth-Arlington, TX	481130061	Earhart	3434 Bickers (Earhart Elem School), Dallas	32.785359	-96.876571	Urban and Center City	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	484391053	Fort Worth California Parkway North	1198 California Parkway North,	32.664722	-97.338056	Urban and Center City	CO	Near-Road, SLAMS	Gas Filter Correlation	Continuous	Max Precursor Emissions Impact	Microscale
Dallas-Fort Worth-Arlington, TX	484391053	Fort Worth California Parkway North	1198 California Parkway North,	32.664722	-97.338056	Urban and Center City	NO/NO2/NOx	Near-Road, SLAMS	Chemi-luminescence	Continuous	Max Precursor Emissions Impact	Microscale
Dallas-Fort Worth-Arlington, TX	484391053	Fort Worth California Parkway North	1198 California Parkway North,	32.664722	-97.338056	Urban and Center City	PM2.5 (Beta)	QA Collocated, SLAMS	Beta Attenuation	Continuous	Quality Assurance	Microscale
Dallas-Fort Worth-Arlington, TX	484391053	Fort Worth California Parkway North	1198 California Parkway North,	32.664722	-97.338056	Urban and Center City	PM2.5 (Beta)	Near-Road, SLAMS	Beta Attenuation	Continuous	Population Exposure	Microscale
Dallas-Fort Worth-Arlington, TX	484391053	Fort Worth California Parkway North	1198 California Parkway North,	32.664722	-97.338056	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Max Precursor Emissions Impact	Microscale
Dallas-Fort Worth-Arlington, TX	484391053	Fort Worth California Parkway North	1198 California Parkway North,	32.664722	-97.338056	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Max Precursor Emissions Impact	Microscale
Dallas-Fort Worth-Arlington, TX	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	32.805818	-97.356568	Urban and Center City	Carbonyl	PAMS, SLAMS	DNPH Silica HPLC	24 Hours; Seasonal	Max Precursor Emissions Impact	Neighborhood
Dallas-Fort Worth-Arlington, TX	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	32.805818	-97.356568	Urban and Center City	Dew Point	SPM	Derived at site	Continuous	Population Exposure	Middle Scale
Dallas-Fort Worth-Arlington, TX	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	32.805818	-97.356568	Urban and Center City	NO/NO2/NOx	PAMS, SLAMS	Chemi-luminescence	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	32.805818	-97.356568	Urban and Center City	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Dallas-Fort Worth-Arlington, TX	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	32.805818	-97.356568	Urban and Center City	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	32.805818	-97.356568	Urban and Center City	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Max Precursor Emissions Impact	Neighborhood
Dallas-Fort Worth-Arlington, TX	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	32.805818	-97.356568	Urban and Center City	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood
Dallas-Fort Worth-Arlington, TX	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	32.805818	-97.356568	Urban and Center City	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	32.805818	-97.356568	Urban and Center City	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Max Precursor Emissions Impact	Neighborhood
Dallas-Fort Worth-Arlington, TX	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	32.805818	-97.356568	Urban and Center City	TNMOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	32.805818	-97.356568	Urban and Center City	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Max Precursor Emissions Impact	Neighborhood
Dallas-Fort Worth-Arlington, TX	480850005	Frisco	6590 Hillcrest Road, Frisco	33.132400	-96.786419	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale
Dallas-Fort Worth-Arlington, TX	480850005	Frisco	6590 Hillcrest Road, Frisco	33.132400	-96.786419	Suburban	Solar Radiation	SPM	Photovoltaic	Continuous	General-Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	480850005	Frisco	6590 Hillcrest Road, Frisco	33.132400	-96.786419	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	480850005	Frisco	6590 Hillcrest Road, Frisco	33.132400	-96.786419	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	480850009	Frisco Eubanks	6601 Eubanks, Frisco	33.144662	-96.828809	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure; Source Oriented	Neighborhood
Dallas-Fort Worth-Arlington, TX	480850009	Frisco Eubanks	6601 Eubanks, Frisco	33.144662	-96.828809	Suburban	TSP (Pb)	QA Collocated, SLAMS	HiVol ICP-MS	24 Hours; 1/12 Days	Population Exposure; Source Oriented	Neighborhood
Dallas-Fort Worth-Arlington, TX	480850009	Frisco Eubanks	6601 Eubanks, Frisco	33.144662	-96.828809	Suburban	TSP (Pb)	SLAMS	HiVol ICP-MS	24 Hours; 1/6 Days	Population Exposure; Source Oriented	Neighborhood
Dallas-Fort Worth-Arlington, TX	480850009	Frisco Eubanks	6601 Eubanks, Frisco	33.144662	-96.828809	Suburban	Wind (3m)	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	480850029	Frisco Stonebrook	7202 Stonebrook Parkway, Frisco	33.136025	-96.824473	Suburban	TSP (Pb)	SPM	HiVol ICP-MS	24 Hours; 1/6 Days	Population Exposure; Source Oriented	Neighborhood
Dallas-Fort Worth-Arlington, TX	482210001	Granbury	200 N Gordon Street, Granbury	32.442304	-97.803529	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Dallas-Fort Worth-Arlington, TX	482210001	Granbury	200 N Gordon Street, Granbury	32.442304	-97.803529	Suburban	Solar Radiation	SPM	Photovoltaic	Continuous	General-Background	Middle Scale
Dallas-Fort Worth-Arlington, TX	482210001	Granbury	200 N Gordon Street, Granbury	32.442304	-97.803529	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Middle Scale
Dallas-Fort Worth-Arlington, TX	482210001	Granbury	200 N Gordon Street, Granbury	32.442304	-97.803529	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Middle Scale
Dallas-Fort Worth-Arlington, TX	484393009	Grapevine Fairway	4100 Fairway Dr, Grapevine	32.984260	-97.063721	Suburban	Barometric Pressure	PAMS, SLAMS	Barometric pressure transducer	Continuous	Max Ozone Concentration	Neighborhood
Dallas-Fort Worth-Arlington, TX	484393009	Grapevine Fairway	4100 Fairway Dr, Grapevine	32.984260	-97.063721	Suburban	Dew Point	SPM	Derived at site	Continuous	Highest Concentration; Max Ozone Concentration	Neighborhood
Dallas-Fort Worth-Arlington, TX	484393009	Grapevine Fairway	4100 Fairway Dr, Grapevine	32.984260	-97.063721	Suburban	NO/NO2/NOx	PAMS, SLAMS	Chemi-luminescence	Continuous	Max Ozone Concentration; Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	484393009	Grapevine Fairway	4100 Fairway Dr, Grapevine	32.984260	-97.063721	Suburban	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Ozone Concentration; Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	484393009	Grapevine Fairway	4100 Fairway Dr, Grapevine	32.984260	-97.063721	Suburban	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Max Ozone Concentration	Neighborhood
Dallas-Fort Worth-Arlington, TX	484393009	Grapevine Fairway	4100 Fairway Dr, Grapevine	32.984260	-97.063721	Suburban	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Ozone Concentration	Neighborhood
Dallas-Fort Worth-Arlington, TX	484393009	Grapevine Fairway	4100 Fairway Dr, Grapevine	32.984260	-97.063721	Suburban	Speciated VOC (Canister)	PAMS, SLAMS	Canister GC-MS	24 Hours; 1/6 Days	Max Ozone Concentration; Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	484393009	Grapevine Fairway	4100 Fairway Dr, Grapevine	32.984260	-97.063721	Suburban	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Max Ozone Concentration	Neighborhood
Dallas-Fort Worth-Arlington, TX	484393009	Grapevine Fairway	4100 Fairway Dr, Grapevine	32.984260	-97.063721	Suburban	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Max Ozone Concentration	Neighborhood
Dallas-Fort Worth-Arlington, TX	482311006	Greenville	824 Sayle Street, Greenville	33.153088	-96.115572	Suburban	NO/NO2/NOx	SLAMS	Chemi-luminescence	Continuous	Population Exposure; Upwind Background	Neighborhood
Dallas-Fort Worth-Arlington, TX	482311006	Greenville	824 Sayle Street, Greenville	33.153088	-96.115572	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure; Upwind Background	Neighborhood
Dallas-Fort Worth-Arlington, TX	482311006	Greenville	824 Sayle Street, Greenville	33.153088	-96.115572	Suburban	Solar Radiation	SPM	Photovoltaic	Continuous	General-Background	Neighborhood
Dallas-Fort Worth-Arlington, TX	482311006	Greenville	824 Sayle Street, Greenville	33.153088	-96.115572	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Dallas-Fort Worth-Arlington, TX	482311006	Greenville	824 Sayle Street, Greenville	33.153088	-96.115572	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Dallas-Fort Worth-Arlington, TX	484391006	Haws Athletic Center	600 1/2 Congress St, Fort Worth	32.759143	-97.342334	Urban and Center City	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	481391044	Italy	900 FM 667 Ellis County, Italy	32.175417	-96.870189	Rural	Dew Point	SPM	Derived at site	Continuous	Upwind Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	481391044	Italy	900 FM 667 Ellis County, Italy	32.175417	-96.870189	Rural	NO/NO2/NOx	PAMS, SLAMS	Chemi-luminescence	Continuous	Upwind Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	481391044	Italy	900 FM 667 Ellis County, Italy	32.175417	-96.870189	Rural	O3	PAMS, SLAMS	UV Photometric	Continuous	Upwind Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	481391044	Italy	900 FM 667 Ellis County, Italy	32.175417	-96.870189	Rural	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Upwind Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	481391044	Italy	900 FM 667 Ellis County, Italy	32.175417	-96.870189	Rural	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Upwind Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	481391044	Italy	900 FM 667 Ellis County, Italy	32.175417	-96.870189	Rural	Speciated VOC (Canister)	PAMS, SLAMS	Canister GC-MS	24 Hours; 1/6 Days	Upwind Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	481391044	Italy	900 FM 667 Ellis County, Italy	32.175417	-96.870189	Rural	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Upwind Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	481391044	Italy	900 FM 667 Ellis County, Italy	32.175417	-96.870189	Rural	UV Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Upwind Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	481391044	Italy	900 FM 667 Ellis County, Italy	32.175417	-96.870189	Rural	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Upwind Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	482511008	Johnson County Luisa	2420 Luisa Ln, Alvarado	32.469701	-97.169271	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	482511008	Johnson County Luisa	2420 Luisa Ln, Alvarado	32.469701	-97.169271	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	482570005	Kaufman	3790 S Houston St, Kaufman	32.564968	-96.317687	Suburban	Dew Point	SPM	Derived at site	Continuous	Highest Concentration	Neighborhood
Dallas-Fort Worth-Arlington, TX	482570005	Kaufman	3790 S Houston St, Kaufman	32.564968	-96.317687	Suburban	NO/NO2/NOx	PAMS, SLAMS	Chemi-luminescence	Continuous	Population Exposure; Upwind Background	Neighborhood, Urban Scale
Dallas-Fort Worth-Arlington, TX	482570005	Kaufman	3790 S Houston St, Kaufman	32.564968	-96.317687	Suburban	O3	PAMS, SLAMS	UV Photometric	Continuous	Population Exposure; Upwind Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	482570005	Kaufman	3790 S Houston St, Kaufman	32.564968	-96.317687	Suburban	PM2.5 (TEOM)	SPM	TEOM Gravimetric	Continuous	Upwind Background	Regional Scale
Dallas-Fort Worth-Arlington, TX	482570005	Kaufman	3790 S Houston St, Kaufman	32.564968	-96.317687	Suburban	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Upwind Background	Urban Scale

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Dallas-Fort Worth-Arlington, TX	482570005	Kaufman	3790 S Houston St, Kaufman	32.564968	-96.317687	Suburban	SO2	SLAMS	Pulsed Fluorescence	Continuous	Population Exposure; Upwind Background	Neighborhood
Dallas-Fort Worth-Arlington, TX	482570005	Kaufman	3790 S Houston St, Kaufman	32.564968	-96.317687	Suburban	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Upwind Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	482570005	Kaufman	3790 S Houston St, Kaufman	32.564968	-96.317687	Suburban	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Upwind Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	482570005	Kaufman	3790 S Houston St, Kaufman	32.564968	-96.317687	Suburban	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Upwind Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	484392003	Keller	FAA Site off Alta Vista Road, Fort Worth	32.922474	-97.282088	Suburban	NO/NO2/NOx	PAMS, SLAMS	Chemi-luminescence	Continuous	Max Precursor Emissions Impact	Urban Scale
Dallas-Fort Worth-Arlington, TX	484392003	Keller	FAA Site off Alta Vista Road, Fort Worth	32.922474	-97.282088	Suburban	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Ozone Concentration; Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	484392003	Keller	FAA Site off Alta Vista Road, Fort Worth	32.922474	-97.282088	Suburban	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	General-Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	484392003	Keller	FAA Site off Alta Vista Road, Fort Worth	32.922474	-97.282088	Suburban	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	General-Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	484392003	Keller	FAA Site off Alta Vista Road, Fort Worth	32.922474	-97.282088	Suburban	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	General-Background	Urban Scale
Dallas-Fort Worth-Arlington, TX	481390016	Midlothian OFW	2725 Old Fort Worth Road, Midlothian	32.482083	-97.026899	Suburban	NO/NO2/NOx	SLAMS	Chemi-luminescence	Continuous	Source Oriented	Neighborhood
Dallas-Fort Worth-Arlington, TX	481390016	Midlothian OFW	2725 Old Fort Worth Road, Midlothian	32.482083	-97.026899	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale
Dallas-Fort Worth-Arlington, TX	481390016	Midlothian OFW	2725 Old Fort Worth Road, Midlothian	32.482083	-97.026899	Suburban	PM2.5 (Speciation)	SPM	Carbons, elements, ions	24 Hours; 1/6 Days	Population Exposure; Source Oriented	Neighborhood, Regional Scale
Dallas-Fort Worth-Arlington, TX	481390016	Midlothian OFW	2725 Old Fort Worth Road, Midlothian	32.482083	-97.026899	Suburban	PM2.5 (TEOM)	SPM	TEOM Gravimetric	Continuous	Regional Transport	Regional Scale
Dallas-Fort Worth-Arlington, TX	481390016	Midlothian OFW	2725 Old Fort Worth Road, Midlothian	32.482083	-97.026899	Suburban	PM2.5 Mass (Speciation)	SPM	Sequential FRM Gravimetric	24 Hours; 1/6 Days	Population Exposure; Source Oriented	Regional Scale
Dallas-Fort Worth-Arlington, TX	481390016	Midlothian OFW	2725 Old Fort Worth Road, Midlothian	32.482083	-97.026899	Suburban	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood
Dallas-Fort Worth-Arlington, TX	481390016	Midlothian OFW	2725 Old Fort Worth Road, Midlothian	32.482083	-97.026899	Suburban	Solar Radiation	SPM	Photovoltaic	Continuous	General-Background	Neighborhood
Dallas-Fort Worth-Arlington, TX	481390016	Midlothian OFW	2725 Old Fort Worth Road, Midlothian	32.482083	-97.026899	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Dallas-Fort Worth-Arlington, TX	481390016	Midlothian OFW	2725 Old Fort Worth Road, Midlothian	32.482083	-97.026899	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Dallas-Fort Worth-Arlington, TX	483670081	Parker County	3033 New Authon Rd, Weatherford	32.868773	-97.905931	Rural	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale
Dallas-Fort Worth-Arlington, TX	483670081	Parker County	3033 New Authon Rd, Weatherford	32.868773	-97.905931	Rural	Solar Radiation	SPM	Photovoltaic	Continuous	Source Oriented	Neighborhood
Dallas-Fort Worth-Arlington, TX	483670081	Parker County	3033 New Authon Rd, Weatherford	32.868773	-97.905931	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Source Oriented	Neighborhood
Dallas-Fort Worth-Arlington, TX	483670081	Parker County	3033 New Authon Rd, Weatherford	32.868773	-97.905931	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Source Oriented	Neighborhood
Dallas-Fort Worth-Arlington, TX	481211032	Pilot Point	792 E Northside Dr, Pilot Point	33.410648	-96.944590	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Regional Scale
Dallas-Fort Worth-Arlington, TX	481211032	Pilot Point	792 E Northside Dr, Pilot Point	33.410648	-96.944590	Suburban	Solar Radiation	SPM	Photovoltaic	Continuous	Upwind Background	Regional Scale
Dallas-Fort Worth-Arlington, TX	481211032	Pilot Point	792 E Northside Dr, Pilot Point	33.410648	-96.944590	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Upwind Background	Regional Scale
Dallas-Fort Worth-Arlington, TX	481211032	Pilot Point	792 E Northside Dr, Pilot Point	33.410648	-96.944590	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Upwind Background	Regional Scale
Dallas-Fort Worth-Arlington, TX	483970001	Rockwall Heath	100 E Heath St, Rockwall	32.936523	-96.459211	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	483970001	Rockwall Heath	100 E Heath St, Rockwall	32.936523	-96.459211	Suburban	Solar Radiation	SPM	Photovoltaic	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	483970001	Rockwall Heath	100 E Heath St, Rockwall	32.936523	-96.459211	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	483970001	Rockwall Heath	100 E Heath St, Rockwall	32.936523	-96.459211	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
Dallas-Fort Worth-Arlington, TX	482570020	Terrell Temtex	2988 Temtex Blvd, Terrell	32.731919	-96.317911	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Dallas-Fort Worth-Arlington, TX	482570020	Terrell Temtex	2988 Temtex Blvd, Terrell	32.731919	-96.317911	Rural	TSP (Pb)	SLAMS	HiVol ICP-MS	24 Hours; 1/6 Days	Population Exposure; Source Oriented	Neighborhood
Dallas-Fort Worth-Arlington, TX	482570020	Terrell Temtex	2988 Temtex Blvd, Terrell	32.731919	-96.317911	Rural	TSP (Pb)	QA Collocated, SLAMS	HiVol ICP-MS	24 Hours; 1/12 Days	Population Exposure; Source Oriented	Neighborhood
Dallas-Fort Worth-Arlington, TX	482570020	Terrell Temtex	2988 Temtex Blvd, Terrell	32.731919	-96.317911	Rural	Wind (3m)	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

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Eagle Pass***	483230004	Eagle Pass	265 Foster Maldonado, Eagle Pass	28.704607	-100.451156	Urban and Center City	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Regional Transport	Regional Scale
Eagle Pass***	483230004	Eagle Pass	265 Foster Maldonado, Eagle Pass	28.704607	-100.451156	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Regional Transport	Regional Scale
Eagle Pass***	483230004	Eagle Pass	265 Foster Maldonado, Eagle Pass	28.704607	-100.451156	Urban and Center City	Visibility	SPM	Visibility Sensor	Continuous	Regional Transport	Regional Scale
Eagle Pass***	483230004	Eagle Pass	265 Foster Maldonado, Eagle Pass	28.704607	-100.451156	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Regional Transport	Regional Scale
El Paso, TX	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	31.746775	-106.402806	Suburban	Barometric Pressure	PAMS, SLAMS	Barometric pressure transducer	Continuous	Max Ozone Concentration; Upwind Background	Neighborhood
El Paso, TX	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	31.746775	-106.402806	Suburban	Dew Point	SPM	Derived at site	Continuous	Highest Concentration; Upwind Background	Urban Scale
El Paso, TX	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	31.746775	-106.402806	Suburban	NO/NO2/NOx	PAMS, SLAMS	Chemi-luminescence	Continuous	Highest Concentration; Upwind Background	Neighborhood, Urban Scale
El Paso, TX	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	31.746775	-106.402806	Suburban	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Ozone Concentration; Upwind Background	Neighborhood
El Paso, TX	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	31.746775	-106.402806	Suburban	PM2.5 (TEOM)	SPM	TEOM Gravimetric	Continuous	Population Exposure	Neighborhood
El Paso, TX	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	31.746775	-106.402806	Suburban	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Max Ozone Concentration; Upwind Background	Neighborhood
El Paso, TX	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	31.746775	-106.402806	Suburban	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Ozone Concentration; Upwind Background	Neighborhood
El Paso, TX	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	31.746775	-106.402806	Suburban	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Max Ozone Concentration; Upwind Background	Neighborhood
El Paso, TX	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	31.746775	-106.402806	Suburban	Visibility	SPM	Visibility Sensor	Continuous	Highest Concentration; Population Exposure	Urban Scale
El Paso, TX	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	31.746775	-106.402806	Suburban	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Max Ozone Concentration; Upwind Background	Neighborhood
El Paso, TX	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	31.765685	-106.455227	Urban and Center City	CO (High Sensitivity)	NCORE, SLAMS	Gas Filter Correlation	Continuous	Highest Concentration	Neighborhood
El Paso, TX	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	31.765685	-106.455227	Urban and Center City	Dew Point	SPM	Derived at site	Continuous	Highest Concentration; Max Precursor Emissions Impact	Neighborhood
El Paso, TX	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	31.765685	-106.455227	Urban and Center City	NO/NO2/NOx	PAMS, SLAMS	Chemi-luminescence	Continuous	Highest Concentration; Max Precursor Emissions Impact	Neighborhood

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El Paso, TX	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	31.765685	-106.455227	Urban and Center City	NOy (High Sensitivity)	NCORE, SLAMS	Chemi-luminescence	Continuous	Highest Concentration	Neighborhood
El Paso, TX	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	31.765685	-106.455227	Urban and Center City	O3	NCORE, PAMS, SLAMS	UV Photometric	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
El Paso, TX	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	31.765685	-106.455227	Urban and Center City	PM10-2.5	NCORE, SLAMS	Beta Attenuation	Continuous	Highest Concentration; Population Exposure	Neighborhood
El Paso, TX	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	31.765685	-106.455227	Urban and Center City	PM2.5	NCORE, SLAMS	Beta Attenuation	Continuous	Highest Concentration; Population Exposure	Neighborhood
El Paso, TX	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	31.765685	-106.455227	Urban and Center City	PM2.5 (FRM)	NCORE, SLAMS	Sequential FRM Gravimetric	24 Hours; 1/3 Days	Highest Concentration; Population Exposure	Neighborhood
El Paso, TX	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	31.765685	-106.455227	Urban and Center City	PM2.5 (Speciation)	CSN STN, NCORE, SLAMS	Carbons, elements, ions, sequential non-FRM gravimetric	24 Hours; 1/3 Days	Highest Concentration	Neighborhood
El Paso, TX	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	31.765685	-106.455227	Urban and Center City	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Max Precursor Emissions Impact	Neighborhood
El Paso, TX	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	31.765685	-106.455227	Urban and Center City	SO2 (High Sensitivity)	NCORE, SLAMS	Pulsed Fluorescence	Continuous	Highest Concentration	Neighborhood
El Paso, TX	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	31.765685	-106.455227	Urban and Center City	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood
El Paso, TX	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	31.765685	-106.455227	Urban and Center City	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Highest Concentration; Max Precursor Emissions Impact	Neighborhood
El Paso, TX	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	31.765685	-106.455227	Urban and Center City	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Max Precursor Emissions Impact	Neighborhood
El Paso, TX	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	31.765685	-106.455227	Urban and Center City	TNMOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Highest Concentration; Max Precursor Emissions Impact	Neighborhood
El Paso, TX	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	31.765685	-106.455227	Urban and Center City	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Max Precursor Emissions Impact	Neighborhood
El Paso, TX	481410038	El Paso Mimosa	7501 Mimosa Avenue, El Paso	31.735857	-106.377909	Suburban	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Population Exposure	Neighborhood
El Paso, TX	481410037	El Paso UTEP	250 Rim Rd, El Paso	31.768291	-106.501260	Urban and Center City	CO	SPM	Gas Filter Correlation	Continuous	Highest Concentration	Neighborhood
El Paso, TX	481410037	El Paso UTEP	250 Rim Rd, El Paso	31.768291	-106.501260	Urban and Center City	Dew Point	SPM	Derived at site	Continuous	Max Ozone Concentration; Population Exposure	Neighborhood
El Paso, TX	481410037	El Paso UTEP	250 Rim Rd, El Paso	31.768291	-106.501260	Urban and Center City	NO/NO2/NOx	PAMS, SLAMS	Chemi-luminescence	Continuous	Max Ozone Concentration; Population Exposure	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
El Paso, TX	481410037	El Paso UTEP	250 Rim Rd, El Paso	31.768291	-106.501260	Urban and Center City	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Ozone Concentration; Population Exposure	Neighborhood
El Paso, TX	481410037	El Paso UTEP	250 Rim Rd, El Paso	31.768291	-106.501260	Urban and Center City	PM2.5 (FRM)	SLAMS	Sequential FRM Gravimetric	24 Hours; 1/6 Days	General-Background; Population Exposure	Neighborhood
El Paso, TX	481410037	El Paso UTEP	250 Rim Rd, El Paso	31.768291	-106.501260	Urban and Center City	PM2.5 (TEOM)	SPM	TEOM Gravimetric	Continuous	Highest Concentration	Neighborhood
El Paso, TX	481410037	El Paso UTEP	250 Rim Rd, El Paso	31.768291	-106.501260	Urban and Center City	Precipitation	PAMS, SLAMS	Rain Gauge	Continuous	Max Ozone Concentration	Neighborhood
El Paso, TX	481410037	El Paso UTEP	250 Rim Rd, El Paso	31.768291	-106.501260	Urban and Center City	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Max Ozone Concentration	Neighborhood
El Paso, TX	481410037	El Paso UTEP	250 Rim Rd, El Paso	31.768291	-106.501260	Urban and Center City	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Ozone Concentration	Neighborhood
El Paso, TX	481410037	El Paso UTEP	250 Rim Rd, El Paso	31.768291	-106.501260	Urban and Center City	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Max Ozone Concentration	Neighborhood
El Paso, TX	481410037	El Paso UTEP	250 Rim Rd, El Paso	31.768291	-106.501260	Urban and Center City	TSP (Pb)	SLAMS	HiVol ICP-MS	24 Hours; 1/6 Days	Population Exposure	Neighborhood
El Paso, TX	481410037	El Paso UTEP	250 Rim Rd, El Paso	31.768291	-106.501260	Urban and Center City	UV Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Ozone Concentration	Neighborhood
El Paso, TX	481410037	El Paso UTEP	250 Rim Rd, El Paso	31.768291	-106.501260	Urban and Center City	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Max Ozone Concentration	Neighborhood
El Paso, TX	481410029	Ivanhoe	10834 Ivanhoe (Ivanhoe Fire Station), El Paso	31.785769	-106.323578	Suburban	O3	SPM	UV Photometric	Continuous	Population Exposure	Neighborhood
El Paso, TX	481410029	Ivanhoe	10834 Ivanhoe (Ivanhoe Fire Station), El Paso	31.785769	-106.323578	Suburban	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Population Exposure	Neighborhood
El Paso, TX	481410029	Ivanhoe	10834 Ivanhoe (Ivanhoe Fire Station), El Paso	31.785769	-106.323578	Suburban	Relative Humidity	Border Grant, SLAMS	Humidity Sensor	Continuous	General-Background	Neighborhood
El Paso, TX	481410029	Ivanhoe	10834 Ivanhoe (Ivanhoe Fire Station), El Paso	31.785769	-106.323578	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
El Paso, TX	481410029	Ivanhoe	10834 Ivanhoe (Ivanhoe Fire Station), El Paso	31.785769	-106.323578	Suburban	Wind	Border Grant, SLAMS	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
El Paso, TX	481411021	Ojo De Agua	6767 Ojo De Agua, El Paso	31.862470	-106.547300	Suburban	CO	SLAMS	Gas Filter Correlation	Continuous	Population Exposure	Neighborhood
El Paso, TX	481411021	Ojo De Agua	6767 Ojo De Agua, El Paso	31.862470	-106.547300	Suburban	PM10 (FRM)	QA Collocated, SLAMS	HiVol Gravimetric	24 Hours; 1/12 Days	Population Exposure	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
El Paso, TX	481411021	Ojo De Agua	6767 Ojo De Agua, El Paso	31.862470	-106.547300	Suburban	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Population Exposure	Neighborhood
El Paso, TX	481411021	Ojo De Agua	6767 Ojo De Agua, El Paso	31.862470	-106.547300	Suburban	TSP (Pb)	SLAMS	HiVol ICP-MS	24 Hours; 1/6 Days	Population Exposure	Neighborhood
El Paso, TX	481411021	Ojo De Agua	6767 Ojo De Agua, El Paso	31.862470	-106.547300	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
El Paso, TX	481410058	Skyline Park	5050A Yvette Drive, El Paso	31.893913	-106.425827	Suburban	O3	Border Grant, SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
El Paso, TX	481410058	Skyline Park	5050A Yvette Drive, El Paso	31.893913	-106.425827	Suburban	Temperature (Outdoor)	Border Grant, SLAMS	Aspirated Thermister	Continuous	Population Exposure	Neighborhood
El Paso, TX	481410058	Skyline Park	5050A Yvette Drive, El Paso	31.893913	-106.425827	Suburban	Wind	Border Grant, SLAMS	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
El Paso, TX	481410057	Socorro Hueco	320 Old Hueco Tanks Road, El Paso	31.667500	-106.288000	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
El Paso, TX	481410057	Socorro Hueco	320 Old Hueco Tanks Road, El Paso	31.667500	-106.288000	Suburban	PM10 (FRM)	Border Grant, SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	General-Background; Population Exposure	Neighborhood
El Paso, TX	481410057	Socorro Hueco	320 Old Hueco Tanks Road, El Paso	31.667500	-106.288000	Suburban	PM10 (FRM)	Border Grant, QA Collocated, SLAMS	HiVol Gravimetric	24 Hours; 1/12 Days	Population Exposure	Neighborhood
El Paso, TX	481410057	Socorro Hueco	320 Old Hueco Tanks Road, El Paso	31.667500	-106.288000	Suburban	PM2.5 (TEOM)	SPM	TEOM Gravimetric	Continuous	Population Exposure	Neighborhood
El Paso, TX	481410057	Socorro Hueco	320 Old Hueco Tanks Road, El Paso	31.667500	-106.288000	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood
El Paso, TX	481410057	Socorro Hueco	320 Old Hueco Tanks Road, El Paso	31.667500	-106.288000	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
El Paso, TX	481410693	Van Buren	2700 Harrison Avenue, El Paso	31.813370	-106.464520	Urban and Center City	PM10 (FRM)	SPM	HiVol Gravimetric	24 Hours; 1/6 Days	Population Exposure	Neighborhood
El Paso, TX	481410693	Van Buren	2700 Harrison Avenue, El Paso	31.813370	-106.464520	Urban and Center City	Relative Humidity	SPM	Humidity Sensor	Continuous	Population Exposure	Neighborhood
El Paso, TX	481410693	Van Buren	2700 Harrison Avenue, El Paso	31.813370	-106.464520	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood
El Paso, TX	481410693	Van Buren	2700 Harrison Avenue, El Paso	31.813370	-106.464520	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010058	Baytown	7210 1/2 Bayway Drive, Baytown	29.770698	-95.031232	Suburban	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Population Exposure	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

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Houston-The Woodlands-Sugar Land, TX	482010058	Baytown	7210 1/2 Bayway Drive, Baytown	29.770698	-95.031232	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Highest Concentration	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010058	Baytown	7210 1/2 Bayway Drive, Baytown	29.770698	-95.031232	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Highest Concentration	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011017	Baytown Garth	8622 Garth Road Unit A, Baytown	29.823319	-94.983786	Suburban	O3	SLAMS	UV Photometric	Continuous	Max Ozone Concentration	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011017	Baytown Garth	8622 Garth Road Unit A, Baytown	29.823319	-94.983786	Suburban	SO2	SLAMS	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011017	Baytown Garth	8622 Garth Road Unit A, Baytown	29.823319	-94.983786	Suburban	Solar Radiation	SPM	Photovoltaic	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011017	Baytown Garth	8622 Garth Road Unit A, Baytown	29.823319	-94.983786	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011017	Baytown Garth	8622 Garth Road Unit A, Baytown	29.823319	-94.983786	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010026	Channelview	1405 Sheldon Road, Channelview	29.802707	-95.125495	Suburban	Dew Point	SPM	Derived at site	Continuous	Highest Concentration	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010026	Channelview	1405 Sheldon Road, Channelview	29.802707	-95.125495	Suburban	NO/NO2/NOx	PAMS, SLAMS	Chemi-luminescence	Continuous	Population Exposure	Middle Scale, Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010026	Channelview	1405 Sheldon Road, Channelview	29.802707	-95.125495	Suburban	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010026	Channelview	1405 Sheldon Road, Channelview	29.802707	-95.125495	Suburban	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Max Precursor Emissions Impact	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010026	Channelview	1405 Sheldon Road, Channelview	29.802707	-95.125495	Suburban	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010026	Channelview	1405 Sheldon Road, Channelview	29.802707	-95.125495	Suburban	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010026	Channelview	1405 Sheldon Road, Channelview	29.802707	-95.125495	Suburban	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Max Precursor Emissions Impact	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010026	Channelview	1405 Sheldon Road, Channelview	29.802707	-95.125495	Suburban	TNMOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010026	Channelview	1405 Sheldon Road, Channelview	29.802707	-95.125495	Suburban	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Max Precursor Emissions Impact	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	Barometric Pressure	PAMS, SLAMS	Barometric pressure transducer	Continuous	Max Precursor Emissions Impact	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	Carbonyl	PAMS, SLAMS	DNPH Silica HPLC	24 Hours; Seasonal	Max Precursor Emissions Impact	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	CO (High Sensitivity)	SPM	Gas Filter Correlation	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	Dew Point	SPM	Derived at site	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	NO/NO2/NOx	PAMS, SLAMS	Chemi-luminescence	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Highest Concentration; Source Oriented	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	PM10 (FRM)	QA Collocated, SLAMS	HiVol Gravimetric	24 Hours; 1/12 Days	Highest Concentration; Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	PM2.5 (FRM)	SLAMS	Sequential FRM Gravimetric	24 Hours; 1/1 Days	Highest Concentration; Population Exposure; Source Oriented	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	PM2.5 (FRM)	QA Collocated, SLAMS	Sequential FRM Gravimetric	24 Hours; 1/12 Days	Highest Concentration; Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	PM2.5 (TEOM)	SPM	TEOM Gravimetric	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	Precipitation	SPM	Rain Gauge	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Max Precursor Emissions Impact	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	SO2	SLAMS	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Highest Concentration; Population Exposure; Source Oriented	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Max Precursor Emissions Impact	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	TNMOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Highest Concentration; Population Exposure; Source Oriented	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	UV Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011035	Clinton	9525 1/2 Clinton Dr, Houston	29.733726	-95.257593	Urban and Center City	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Max Precursor Emissions Impact	Neighborhood
Houston-The Woodlands-Sugar Land, TX	483390078	Conroe Relocated	9472A Hwy 1484, Conroe	30.350302	-95.425128	Suburban	NO/NO2/NOx	PAMS, SLAMS	Chemi-luminescence	Continuous	General-Background; Population Exposure	Urban Scale
Houston-The Woodlands-Sugar Land, TX	483390078	Conroe Relocated	9472A Hwy 1484, Conroe	30.350302	-95.425128	Suburban	O3	PAMS, SLAMS	UV Photometric	Continuous	General-Background; Population Exposure	Urban Scale
Houston-The Woodlands-Sugar Land, TX	483390078	Conroe Relocated	9472A Hwy 1484, Conroe	30.350302	-95.425128	Suburban	PM2.5 (TEOM)	SPM	TEOM Gravimetric	Continuous	General-Background	Neighborhood
Houston-The Woodlands-Sugar Land, TX	483390078	Conroe Relocated	9472A Hwy 1484, Conroe	30.350302	-95.425128	Suburban	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Highest Concentration	Neighborhood
Houston-The Woodlands-Sugar Land, TX	483390078	Conroe Relocated	9472A Hwy 1484, Conroe	30.350302	-95.425128	Suburban	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Highest Concentration	Neighborhood
Houston-The Woodlands-Sugar Land, TX	483390078	Conroe Relocated	9472A Hwy 1484, Conroe	30.350302	-95.425128	Suburban	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Highest Concentration	Neighborhood
Houston-The Woodlands-Sugar Land, TX	481671034	Galveston 99th Street	9511 Avenue V 1/2, Galveston	29.254474	-94.861289	Suburban	Dew Point	SPM	Derived at site	Continuous	General-Background; Upwind Background	Middle Scale
Houston-The Woodlands-Sugar Land, TX	481671034	Galveston 99th Street	9511 Avenue V 1/2, Galveston	29.254474	-94.861289	Suburban	NO/NO2/NOx	PAMS, SLAMS	Chemi-luminescence	Continuous	General-Background; Upwind Background	Middle Scale, Urban Scale
Houston-The Woodlands-Sugar Land, TX	481671034	Galveston 99th Street	9511 Avenue V 1/2, Galveston	29.254474	-94.861289	Suburban	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Ozone Concentration; Upwind Background	Urban Scale
Houston-The Woodlands-Sugar Land, TX	481671034	Galveston 99th Street	9511 Avenue V 1/2, Galveston	29.254474	-94.861289	Suburban	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Regional Transport	Regional Scale
Houston-The Woodlands-Sugar Land, TX	481671034	Galveston 99th Street	9511 Avenue V 1/2, Galveston	29.254474	-94.861289	Suburban	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Max Ozone Concentration; Upwind Background	Urban Scale
Houston-The Woodlands-Sugar Land, TX	481671034	Galveston 99th Street	9511 Avenue V 1/2, Galveston	29.254474	-94.861289	Suburban	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Ozone Concentration; Upwind Background	Urban Scale
Houston-The Woodlands-Sugar Land, TX	481671034	Galveston 99th Street	9511 Avenue V 1/2, Galveston	29.254474	-94.861289	Suburban	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Max Ozone Concentration; Upwind Background	Urban Scale
Houston-The Woodlands-Sugar Land, TX	481671034	Galveston 99th Street	9511 Avenue V 1/2, Galveston	29.254474	-94.861289	Suburban	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Max Ozone Concentration; Upwind Background	Urban Scale
Houston-The Woodlands-Sugar Land, TX	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	29.901036	-95.326137	Suburban	Barometric Pressure	PAMS, SLAMS	Barometric pressure transducer	Continuous	Max Ozone Concentration	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Houston-The Woodlands-Sugar Land, TX	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	29.901036	-95.326137	Suburban	Dew Point	SPM	Derived at site	Continuous	Population Exposure	Urban Scale
Houston-The Woodlands-Sugar Land, TX	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	29.901036	-95.326137	Suburban	NO/NO2/NOx	PAMS, SLAMS	Chemi-luminescence	Continuous	Max Ozone Concentration; Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	29.901036	-95.326137	Suburban	NOy (High Sensitivity)	PAMS, SLAMS	Chemi-luminescence	Continuous	Max Ozone Concentration; Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	29.901036	-95.326137	Suburban	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Ozone Concentration; Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	29.901036	-95.326137	Suburban	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	29.901036	-95.326137	Suburban	PM2.5 (FRM)	QA Collocated, SLAMS	Sequential FRM Gravimetric		Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	29.901036	-95.326137	Suburban	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Max Ozone Concentration	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	29.901036	-95.326137	Suburban	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Ozone Concentration	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	29.901036	-95.326137	Suburban	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Max Ozone Concentration	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	29.901036	-95.326137	Suburban	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Max Ozone Concentration	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010055	Houston Bayland Park	6400 Bissonnet Street, Houston	29.695729	-95.499219	Suburban	NO/NO2/NOx	SLAMS	Chemi-luminescence	Continuous	Population Exposure	Middle Scale, Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010055	Houston Bayland Park	6400 Bissonnet Street, Houston	29.695729	-95.499219	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Middle Scale
Houston-The Woodlands-Sugar Land, TX	482010055	Houston Bayland Park	6400 Bissonnet Street, Houston	29.695729	-95.499219	Suburban	Solar Radiation	SPM	Photovoltaic	Continuous	General-Background; Max Precursor Emissions Impact	Middle Scale
Houston-The Woodlands-Sugar Land, TX	482010055	Houston Bayland Park	6400 Bissonnet Street, Houston	29.695729	-95.499219	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background; Max Precursor Emissions Impact	Middle Scale
Houston-The Woodlands-Sugar Land, TX	482010055	Houston Bayland Park	6400 Bissonnet Street, Houston	29.695729	-95.499219	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background; Max Precursor Emissions Impact	Middle Scale
Houston-The Woodlands-Sugar Land, TX	482010051	Houston Croquet	13826 1/2 Croquet, Houston	29.623889	-95.474167	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010051	Houston Croquet	13826 1/2 Croquet, Houston	29.623889	-95.474167	Suburban	SO2	SPM	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Houston-The Woodlands-Sugar Land, TX	482010051	Houston Croquet	13826 1/2 Croquet, Houston	29.623889	-95.474167	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010051	Houston Croquet	13826 1/2 Croquet, Houston	29.623889	-95.474167	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	Barometric Pressure	PAMS, SLAMS	Barometric pressure transducer	Continuous	General-Background	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	Carbonyl	PAMS, SLAMS	DNPH Silica HPLC	8 Hour; Seasonal, 24 Hours; Seasonal	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	CO (High Sensitivity)	NCORE, SLAMS	Gas Filter Correlation	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	Dew Point	SPM	Derived at site	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	NO2 (Direct)	PAMS, SLAMS	Direct-Read NO2	Continuous	Population Exposure; Source Oriented	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	NOy (High Sensitivity)	NCORE, PAMS, SLAMS	Chemi-luminescence	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	O3	NCORE, PAMS, SLAMS	UV Photometric	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	PM10-2.5	NCORE, SLAMS	Beta Attenuation	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	PM2.5	NCORE, SLAMS	Beta Attenuation	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	PM2.5 (FRM)	NCORE, SLAMS	Sequential FRM Gravimetric	24 Hours; 1/3 Days	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	PM2.5 (Speciation)	CSN STN, NCORE, SLAMS	Carbons, elements, ions, sequential non-FRM gravimetric	24 Hours; 1/3 Days	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	PM2.5 (Speciation)	CSN STN, QA Collocated, SLAMS		24 Hours; 1/6 Days	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	Precipitation	PAMS, SLAMS	Rain Gauge	Continuous	General-Background	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	Relative Humidity	NCORE, PAMS, SLAMS	Humidity Sensor	Continuous	Max Precursor Emissions Impact	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	SO2 (High Sensitivity)	NCORE, SLAMS	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	Temperature (Outdoor)	NCORE, PAMS, SLAMS	Aspirated Thermister	Continuous	Max Precursor Emissions Impact	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	TNMOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	UV Radiation	PAMS, SLAMS	Photovoltaic	Continuous	General-Background	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	29.670025	-95.128508	Urban and Center City	Wind	NCORE, PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Max Precursor Emissions Impact	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011034	Houston East	1262 1/2 Mae Drive, Houston	29.767997	-95.220582	Suburban	NO/NO2/NOx	SLAMS	Chemi-luminescence	Continuous	Highest Concentration; Population Exposure	Middle Scale, Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011034	Houston East	1262 1/2 Mae Drive, Houston	29.767997	-95.220582	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011034	Houston East	1262 1/2 Mae Drive, Houston	29.767997	-95.220582	Suburban	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011034	Houston East	1262 1/2 Mae Drive, Houston	29.767997	-95.220582	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Urban Scale
Houston-The Woodlands-Sugar Land, TX	482011034	Houston East	1262 1/2 Mae Drive, Houston	29.767997	-95.220582	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010060	Houston Kirkpatrick	5565 Kirkpatrick, Houston	29.807415	-95.293622	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010060	Houston Kirkpatrick	5565 Kirkpatrick, Houston	29.807415	-95.293622	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010062	Houston Monroe	9726 1/2 Monroe, Houston	29.625556	-95.267222	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010062	Houston Monroe	9726 1/2 Monroe, Houston	29.625556	-95.267222	Suburban	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010062	Houston Monroe	9726 1/2 Monroe, Houston	29.625556	-95.267222	Suburban	Precipitation	SPM	Rain Gauge	Continuous	General-Background	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011052	Houston North Loop	822 North Loop, Houston	29.814530	-95.387690	Urban and Center City	CO	Near-Road, SLAMS	Gas Filter Correlation	Continuous	Max Precursor Emissions Impact	Microscale

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Houston-The Woodlands-Sugar Land, TX	482011052	Houston North Loop	822 North Loop, Houston	29.814530	-95.387690	Urban and Center City	NO/NO2/NOx	Near-Road, SLAMS	Chemi-luminescence	Continuous	Max Precursor Emissions Impact	Microscale
Houston-The Woodlands-Sugar Land, TX	482011052	Houston North Loop	822 North Loop, Houston	29.814530	-95.387690	Urban and Center City	PM2.5 (FRM)	Near-Road, SLAMS	Sequential FRM Gravimetric	24 Hours; 1/3 Days	Max Precursor Emissions Impact	Microscale
Houston-The Woodlands-Sugar Land, TX	482011052	Houston North Loop	822 North Loop, Houston	29.814530	-95.387690	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Max Precursor Emissions Impact	Microscale
Houston-The Woodlands-Sugar Land, TX	482011052	Houston North Loop	822 North Loop, Houston	29.814530	-95.387690	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Max Precursor Emissions Impact	Microscale
Houston-The Woodlands-Sugar Land, TX	482010046	Houston North Wayside	7330 1/2 North Wayside, Houston	29.828086	-95.284096	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011066	Houston Southwest Freeway	5617 Westward Avenue, Houston	29.721600	-95.492650	Urban and Center City	NO/NO2/NOx	Near-Road, SLAMS	Chemi-luminescence	Continuous	Max Precursor Emissions Impact	Microscale
Houston-The Woodlands-Sugar Land, TX	482011066	Houston Southwest Freeway	5617 Westward Avenue, Houston	29.721600	-95.492650	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Max Precursor Emissions Impact	Microscale
Houston-The Woodlands-Sugar Land, TX	482011066	Houston Southwest Freeway	5617 Westward Avenue, Houston	29.721600	-95.492650	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Max Precursor Emissions Impact	Microscale
Houston-The Woodlands-Sugar Land, TX	482010066	Houston Westhollow	3333 1/2 Hwy 6 South, Houston	29.723333	-95.635833	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010066	Houston Westhollow	3333 1/2 Hwy 6 South, Houston	29.723333	-95.635833	Suburban	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010066	Houston Westhollow	3333 1/2 Hwy 6 South, Houston	29.723333	-95.635833	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010066	Houston Westhollow	3333 1/2 Hwy 6 South, Houston	29.723333	-95.635833	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011043	La Porte Airport C243	La Porte Airport, 2434 Buchanan Street, La Porte	29.672000	-95.064700	Suburban	Precipitation	PAMS, SLAMS	Rain Gauge	Continuous	General-Background	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011043	La Porte Airport C243	La Porte Airport, 2434 Buchanan Street, La Porte	29.672000	-95.064700	Suburban	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	General-Background	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011043	La Porte Airport C243	La Porte Airport, 2434 Buchanan Street, La Porte	29.672000	-95.064700	Suburban	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Houston-The Woodlands-Sugar Land, TX	480391016	Lake Jackson	109B Brazoria Hwy 332 West, Lake Jackson	29.043759	-95.472946	Suburban	NO/NO2/NOx	SLAMS	Chemi-luminescence	Continuous	Population Exposure; Source Oriented	Middle Scale, Neighborhood
Houston-The Woodlands-Sugar Land, TX	480391016	Lake Jackson	109B Brazoria Hwy 332 West, Lake Jackson	29.043759	-95.472946	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure; Source Oriented	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Houston-The Woodlands-Sugar Land, TX	480391016	Lake Jackson	109B Brazoria Hwy 332 West, Lake Jackson	29.043759	-95.472946	Suburban	Solar Radiation	SPM	Photovoltaic	Continuous	Highest Concentration	Middle Scale
Houston-The Woodlands-Sugar Land, TX	480391016	Lake Jackson	109B Brazoria Hwy 332 West, Lake Jackson	29.043759	-95.472946	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Highest Concentration	Middle Scale
Houston-The Woodlands-Sugar Land, TX	480391016	Lake Jackson	109B Brazoria Hwy 332 West, Lake Jackson	29.043759	-95.472946	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Highest Concentration	Middle Scale
Houston-The Woodlands-Sugar Land, TX	482010047	Lang	4401 1/2 Lang Rd, Houston	29.834167	-95.489167	Suburban	NO/NO2/NOx	SLAMS	Chemi-luminescence	Continuous	Population Exposure	Middle Scale, Urban Scale
Houston-The Woodlands-Sugar Land, TX	482010047	Lang	4401 1/2 Lang Rd, Houston	29.834167	-95.489167	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale
Houston-The Woodlands-Sugar Land, TX	482010047	Lang	4401 1/2 Lang Rd, Houston	29.834167	-95.489167	Suburban	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011015	Lynchburg Ferry	4364 Independence Parkway South, Baytown	29.758889	-95.079444	Suburban	NO/NO2/NOx	SLAMS	Chemi-luminescence	Continuous	Source Oriented	Middle Scale, Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011015	Lynchburg Ferry	4364 Independence Parkway South, Baytown	29.758889	-95.079444	Suburban	O3	SLAMS	UV Photometric	Continuous	Source Oriented	Middle Scale
Houston-The Woodlands-Sugar Land, TX	482011015	Lynchburg Ferry	4364 Independence Parkway South, Baytown	29.758889	-95.079444	Suburban	Solar Radiation	SPM	Photovoltaic	Continuous	Highest Concentration	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011015	Lynchburg Ferry	4364 Independence Parkway South, Baytown	29.758889	-95.079444	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Highest Concentration	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011015	Lynchburg Ferry	4364 Independence Parkway South, Baytown	29.758889	-95.079444	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Highest Concentration	Neighborhood
Houston-The Woodlands-Sugar Land, TX	480391004	Manvel Croix Park	4503 Croix Pkwy, Manvel	29.520443	-95.392509	Suburban	NO/NO2/NOx	SLAMS	Chemi-luminescence	Continuous	Population Exposure	Urban Scale
Houston-The Woodlands-Sugar Land, TX	480391004	Manvel Croix Park	4503 Croix Pkwy, Manvel	29.520443	-95.392509	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale
Houston-The Woodlands-Sugar Land, TX	480391004	Manvel Croix Park	4503 Croix Pkwy, Manvel	29.520443	-95.392509	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	480391004	Manvel Croix Park	4503 Croix Pkwy, Manvel	29.520443	-95.392509	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010029	Northwest Harris County	16822 Kitzman, Tomball	30.039524	-95.673951	Rural	Dew Point	SPM	Derived at site	Continuous	Source Oriented	Microscale
Houston-The Woodlands-Sugar Land, TX	482010029	Northwest Harris County	16822 Kitzman, Tomball	30.039524	-95.673951	Rural	NO/NO2/NOx	PAMS, SLAMS	Chemi-luminescence	Continuous	Extreme Downwind; Population Exposure; Upwind Background	Urban Scale

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Houston-The Woodlands-Sugar Land, TX	482010029	Northwest Harris County	16822 Kitzman, Tomball	30.039524	-95.673951	Rural	O3	PAMS, SLAMS	UV Photometric	Continuous	Extreme Downwind; Population Exposure; Upwind Background	Urban Scale
Houston-The Woodlands-Sugar Land, TX	482010029	Northwest Harris County	16822 Kitzman, Tomball	30.039524	-95.673951	Rural	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Extreme Downwind; Upwind Background	Urban Scale
Houston-The Woodlands-Sugar Land, TX	482010029	Northwest Harris County	16822 Kitzman, Tomball	30.039524	-95.673951	Rural	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Extreme Downwind; Upwind Background	Urban Scale
Houston-The Woodlands-Sugar Land, TX	482010029	Northwest Harris County	16822 Kitzman, Tomball	30.039524	-95.673951	Rural	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Extreme Downwind; Upwind Background	Urban Scale
Houston-The Woodlands-Sugar Land, TX	482010029	Northwest Harris County	16822 Kitzman, Tomball	30.039524	-95.673951	Rural	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Extreme Downwind; Upwind Background	Urban Scale
Houston-The Woodlands-Sugar Land, TX	482010416	Park Place	7421 Park Place Blvd, Houston	29.686389	-95.294722	Urban and Center City	Barometric Pressure	SPM	Barometric pressure transducer	Continuous	General-Background	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010416	Park Place	7421 Park Place Blvd, Houston	29.686389	-95.294722	Urban and Center City	Dew Point	SPM	Derived at site	Continuous	General-Background	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010416	Park Place	7421 Park Place Blvd, Houston	29.686389	-95.294722	Urban and Center City	NO/NO2/NOx	SPM	Chemi-luminescence	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010416	Park Place	7421 Park Place Blvd, Houston	29.686389	-95.294722	Urban and Center City	O3	SPM	UV Photometric	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010416	Park Place	7421 Park Place Blvd, Houston	29.686389	-95.294722	Urban and Center City	Precipitation	SPM	Rain Gauge	Continuous	General-Background	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010416	Park Place	7421 Park Place Blvd, Houston	29.686389	-95.294722	Urban and Center City	Relative Humidity	SPM	Humidity Sensor	Continuous	General-Background	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010416	Park Place	7421 Park Place Blvd, Houston	29.686389	-95.294722	Urban and Center City	SO2	SPM	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010416	Park Place	7421 Park Place Blvd, Houston	29.686389	-95.294722	Urban and Center City	Solar Radiation	SPM	Photovoltaic	Continuous	General-Background	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010416	Park Place	7421 Park Place Blvd, Houston	29.686389	-95.294722	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010416	Park Place	7421 Park Place Blvd, Houston	29.686389	-95.294722	Urban and Center City	UV Radiation	SPM	Photovoltaic	Continuous	General-Background	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482010416	Park Place	7421 Park Place Blvd, Houston	29.686389	-95.294722	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011050	Seabrook Friendship Park	4522 Park Rd, Seabrook	29.583047	-95.015544	Suburban	NO/NO2/NOx	SLAMS	Chemi-luminescence	Continuous	Population Exposure	Middle Scale, Neighborhood

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Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Houston-The Woodlands-Sugar Land, TX	482011050	Seabrook Friendship Park	4522 Park Rd, Seabrook	29.583047	-95.015544	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
Houston-The Woodlands-Sugar Land, TX	482011050	Seabrook Friendship Park	4522 Park Rd, Seabrook	29.583047	-95.015544	Suburban	PM2.5 (TEOM)	SPM	TEOM Gravimetric	Continuous	Highest Concentration	Middle Scale
Houston-The Woodlands-Sugar Land, TX	482011050	Seabrook Friendship Park	4522 Park Rd, Seabrook	29.583047	-95.015544	Suburban	Solar Radiation	SPM	Photovoltaic	Continuous	Highest Concentration	Middle Scale
Houston-The Woodlands-Sugar Land, TX	482011050	Seabrook Friendship Park	4522 Park Rd, Seabrook	29.583047	-95.015544	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Highest Concentration	Middle Scale
Houston-The Woodlands-Sugar Land, TX	482011050	Seabrook Friendship Park	4522 Park Rd, Seabrook	29.583047	-95.015544	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Highest Concentration	Middle Scale
Houston-The Woodlands-Sugar Land, TX	480710013	Smith Point Hawkins Camp	1850 Hawkins Camp Rd, Anahuac	29.546244	-94.786969	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Source Oriented	Neighborhood
Houston-The Woodlands-Sugar Land, TX	480710013	Smith Point Hawkins Camp	1850 Hawkins Camp Rd, Anahuac	29.546244	-94.786969	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Source Oriented	Neighborhood
Houston-The Woodlands-Sugar Land, TX	481670004	Texas City Fire Station	2516 Texas Avenue, Texas City	29.384444	-94.930833	Urban and Center City	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Highest Concentration	Neighborhood
Killeen-Temple-Fort Hood, TX	480271047	Killeen Skylark Field	1605 Stone Tree Drive, Killeen	31.088002	-97.679734	Urban and Center City	NO/NO2/NOx	SPM	Chemi-luminescence	Continuous	General-Background	Urban Scale
Killeen-Temple-Fort Hood, TX	480271047	Killeen Skylark Field	1605 Stone Tree Drive, Killeen	31.088002	-97.679734	Urban and Center City	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale
Killeen-Temple-Fort Hood, TX	480271047	Killeen Skylark Field	1605 Stone Tree Drive, Killeen	31.088002	-97.679734	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Urban Scale
Killeen-Temple-Fort Hood, TX	480271047	Killeen Skylark Field	1605 Stone Tree Drive, Killeen	31.088002	-97.679734	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Urban Scale
Killeen-Temple-Fort Hood, TX	480271045	Temple Georgia	8406 Georgia Avenue, Temple	31.122419	-97.431052	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale
Killeen-Temple-Fort Hood, TX	480271045	Temple Georgia	8406 Georgia Avenue, Temple	31.122419	-97.431052	Suburban	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Population Exposure	Urban Scale
Killeen-Temple-Fort Hood, TX	480271045	Temple Georgia	8406 Georgia Avenue, Temple	31.122419	-97.431052	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Killeen-Temple-Fort Hood, TX	480271045	Temple Georgia	8406 Georgia Avenue, Temple	31.122419	-97.431052	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Kingsville***	482730314	National Seashore	20420 Park Road, Corpus Christi	27.426981	-97.298692	Rural	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Regional Transport	Regional Scale

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Kingsville***	482730314	National Seashore	20420 Park Road, Corpus Christi	27.426981	-97.298692	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Regional Transport	Regional Scale
Kingsville***	482730314	National Seashore	20420 Park Road, Corpus Christi	27.426981	-97.298692	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Regional Transport	Regional Scale
Laredo, TX	484790017	Laredo Bridge	700 Zaragosa St, Laredo	27.501826	-99.502984	Urban and Center City	PM10 (FRM)	Border Grant, SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Highest Concentration	Microscale
Laredo, TX	484790017	Laredo Bridge	700 Zaragosa St, Laredo	27.501826	-99.502984	Urban and Center City	Speciated VOC (Canister)	Border Grant, SLAMS	Canister GC-MS	24 Hours; 1/6 Days	Highest Concentration	Neighborhood
Laredo, TX	484790017	Laredo Bridge	700 Zaragosa St, Laredo	27.501826	-99.502984	Urban and Center City	Temperature (Outdoor)	Border Grant, SLAMS	Aspirated Thermister	Continuous	Population Exposure	Neighborhood
Laredo, TX	484790017	Laredo Bridge	700 Zaragosa St, Laredo	27.501826	-99.502984	Urban and Center City	Wind	Border Grant, SLAMS	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
Laredo, TX	484790016	Laredo Vidaurri	2020 Vidaurri Ave, Laredo	27.517456	-99.515222	Suburban	CO	Border Grant, SLAMS	Gas Filter Correlation	Continuous	Population Exposure	Neighborhood
Laredo, TX	484790016	Laredo Vidaurri	2020 Vidaurri Ave, Laredo	27.517456	-99.515222	Suburban	O3	Border Grant, SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
Laredo, TX	484790016	Laredo Vidaurri	2020 Vidaurri Ave, Laredo	27.517456	-99.515222	Suburban	PM10 (FRM)	Border Grant, SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Population Exposure	Neighborhood
Laredo, TX	484790016	Laredo Vidaurri	2020 Vidaurri Ave, Laredo	27.517456	-99.515222	Suburban	Temperature (Outdoor)	Border Grant, SLAMS	Aspirated Thermister	Continuous	Population Exposure	Neighborhood
Laredo, TX	484790016	Laredo Vidaurri	2020 Vidaurri Ave, Laredo	27.517456	-99.515222	Suburban	Wind	Border Grant, SLAMS	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
Laredo, TX	484790313	World Trade Bridge	Mines Road 11601 FM 1472, Laredo	27.599444	-99.533333	Suburban	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Source Oriented	Microscale
Longview, TX	481830001	Longview	Gregg Co Airport near Longview, Longview	32.378682	-94.711811	Rural	NO/NO2/NOx	SPM	Chemi-luminescence	Continuous	Population Exposure	Neighborhood
Longview, TX	481830001	Longview	Gregg Co Airport near Longview, Longview	32.378682	-94.711811	Rural	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
Longview, TX	481830001	Longview	Gregg Co Airport near Longview, Longview	32.378682	-94.711811	Rural	Precipitation	SPM	Rain Gauge	Continuous	General-Background	Neighborhood
Longview, TX	481830001	Longview	Gregg Co Airport near Longview, Longview	32.378682	-94.711811	Rural	SO2	SLAMS	Pulsed Fluorescence	Continuous	General-Background; Population Exposure	Neighborhood
Longview, TX	481830001	Longview	Gregg Co Airport near Longview, Longview	32.378682	-94.711811	Rural	Solar Radiation	SPM	Photovoltaic	Continuous	General-Background	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Longview, TX	481830001	Longview	Gregg Co Airport near Longview, Longview	32.378682	-94.711811	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Longview, TX	481830001	Longview	Gregg Co Airport near Longview, Longview	32.378682	-94.711811	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Longview, TX	484011082	Tatum CR 2181d Martin Creek Lake	9515 County Road 2181d, Tatum	32.277800	-94.570800	Rural	SO2	SPM	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood
Longview, TX	484011082	Tatum CR 2181d Martin Creek Lake	9515 County Road 2181d, Tatum	32.277800	-94.570800	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Longview, TX	484011082	Tatum CR 2181d Martin Creek Lake	9515 County Road 2181d, Tatum	32.277800	-94.570800	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Lubbock, TX	483031028	Lubbock 12th Street	3901 East 12th Street, Lubbock	33.585530	-101.786980	Urban and Center City	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Population Exposure	Urban Scale
Lubbock, TX	483031028	Lubbock 12th Street	3901 East 12th Street, Lubbock	33.585530	-101.786980	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Regional Scale
Lubbock, TX	483031028	Lubbock 12th Street	3901 East 12th Street, Lubbock	33.585530	-101.786980	Urban and Center City	Wind (3m)	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Regional Scale
Marshall***	482031079	Hallsville Red Oak Road	9206 Red Oak Road, Hallsville	32.470200	-94.481500	Rural	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood
Marshall***	482031079	Hallsville Red Oak Road	9206 Red Oak Road, Hallsville	32.470200	-94.481500	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Marshall***	482031079	Hallsville Red Oak Road	9206 Red Oak Road, Hallsville	32.470200	-94.481500	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Marshall***	482030002	Karnack	Hwy 134 & Spur 449, Not In A City	32.668987	-94.167457	Rural	NO/NO2/NOx	SLAMS	Chemi-luminescence	Continuous	General-Background	Regional Scale, Urban Scale
Marshall***	482030002	Karnack	Hwy 134 & Spur 449, Not In A City	32.668987	-94.167457	Rural	O3	SLAMS	UV Photometric	Continuous	General-Background	Regional Scale
Marshall***	482030002	Karnack	Hwy 134 & Spur 449, Not In A City	32.668987	-94.167457	Rural	PM2.5 (FRM)	SPM	Sequential FRM Gravimetric	24 Hours; 1/6 Days	General-Background	Regional Scale
Marshall***	482030002	Karnack	Hwy 134 & Spur 449, Not In A City	32.668987	-94.167457	Rural	PM2.5 (Speciation)	CSN Supplemental, SLAMS	Carbons, elements, ions, sequential non-FRM gravimetric	24 Hours; 1/6 Days, 24 Hours; 1/3 Days	General-Background; Regional Transport	Regional Scale
Marshall***	482030002	Karnack	Hwy 134 & Spur 449, Not In A City	32.668987	-94.167457	Rural	PM2.5 (TEOM)	SPM	TEOM Gravimetric	Continuous	General-Background	Regional Scale
Marshall***	482030002	Karnack	Hwy 134 & Spur 449, Not In A City	32.668987	-94.167457	Rural	Solar Radiation	SPM	Photovoltaic	Continuous	General-Background	Urban Scale

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Marshall***	482030002	Karnack	Hwy 134 & Spur 449, Not In A City	32.668987	-94.167457	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Urban Scale
Marshall***	482030002	Karnack	Hwy 134 & Spur 449, Not In A City	32.668987	-94.167457	Rural	Visibility	SPM	Visibility Sensor	Continuous	General-Background	Urban Scale
Marshall***	482030002	Karnack	Hwy 134 & Spur 449, Not In A City	32.668987	-94.167457	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Urban Scale
McAllen-Edinburg-Mission, TX	482151046	Edinburg East Freddy Gonzalez Drive	1491 East Freddy Gonzalez Drive, Edinburg	26.288622	-98.152066	Urban and Center City	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Population Exposure	Regional Scale
McAllen-Edinburg-Mission, TX	482151046	Edinburg East Freddy Gonzalez Drive	1491 East Freddy Gonzalez Drive, Edinburg	26.288622	-98.152066	Urban and Center City	PM2.5 (FRM)	SLAMS	Sequential FRM Gravimetric	24 Hours; 1/3 Days	Population Exposure	Regional Scale
McAllen-Edinburg-Mission, TX	482151046	Edinburg East Freddy Gonzalez Drive	1491 East Freddy Gonzalez Drive, Edinburg	26.288622	-98.152066	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Regional Scale
McAllen-Edinburg-Mission, TX	482151046	Edinburg East Freddy Gonzalez Drive	1491 East Freddy Gonzalez Drive, Edinburg	26.288622	-98.152066	Urban and Center City	Wind (3m)	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Regional Scale
McAllen-Edinburg-Mission, TX	482150043	Mission	2300 North Glasscock, Mission	26.226210	-98.291069	Suburban	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
McAllen-Edinburg-Mission, TX	482150043	Mission	2300 North Glasscock, Mission	26.226210	-98.291069	Suburban	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Population Exposure	Urban Scale
McAllen-Edinburg-Mission, TX	482150043	Mission	2300 North Glasscock, Mission	26.226210	-98.291069	Suburban	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Population Exposure	Urban Scale
McAllen-Edinburg-Mission, TX	482150043	Mission	2300 North Glasscock, Mission	26.226210	-98.291069	Suburban	Solar Radiation	SPM	Photovoltaic	Continuous	Population Exposure	Microscale
McAllen-Edinburg-Mission, TX	482150043	Mission	2300 North Glasscock, Mission	26.226210	-98.291069	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Microscale
McAllen-Edinburg-Mission, TX	482150043	Mission	2300 North Glasscock, Mission	26.226210	-98.291069	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Microscale
Mount Pleasant***	484491078	Cookville FM 4855	385 CR 4855, Not In A City	33.075200	-94.847400	Rural	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood
Mount Pleasant***	484491078	Cookville FM 4855	385 CR 4855, Not In A City	33.075200	-94.847400	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Mount Pleasant***	484491078	Cookville FM 4855	385 CR 4855, Not In A City	33.075200	-94.847400	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
None	480430101	Bravo Big Bend	Big Bend National Park, Big Bend Nat Park	29.302552	-103.177908	Rural	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	General-Background	Regional Scale

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
None	480430101	Bravo Big Bend	Big Bend National Park, Big Bend Nat Park	29.302552	-103.177908	Rural	Precipitation	SPM	Rain Gauge	Continuous	General-Background	Neighborhood
None	480430101	Bravo Big Bend	Big Bend National Park, Big Bend Nat Park	29.302552	-103.177908	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
None	480430101	Bravo Big Bend	Big Bend National Park, Big Bend Nat Park	29.302552	-103.177908	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Welfare Related Impacts	Neighborhood
None	480430101	Bravo Big Bend	Big Bend National Park, Big Bend Nat Park	29.302552	-103.177908	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Regional Scale
None	481611084	Fairfield FM 2570 Ward Ranch	488 FM 2570, Fairfield	31.797800	-96.103100	Rural	SO2	SPM	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood
None	481611084	Fairfield FM 2570 Ward Ranch	488 FM 2570, Fairfield	31.797800	-96.103100	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Source Oriented	Neighborhood
None	481611084	Fairfield FM 2570 Ward Ranch	488 FM 2570, Fairfield	31.797800	-96.103100	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Source Oriented	Neighborhood
None	483311075	Rockdale John D. Harper Road	3990 John D Harper Road, Rockdale	30.569444	-97.076111	Rural	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood
None	483311075	Rockdale John D. Harper Road	3990 John D Harper Road, Rockdale	30.569444	-97.076111	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
None	483311075	Rockdale John D. Harper Road	3990 John D Harper Road, Rockdale	30.569444	-97.076111	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Odessa, TX	481351014	Odessa Gonzales	2700 Disney, Odessa	31.870253	-102.334756	Suburban	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Highest Concentration	Regional Scale
Odessa, TX	481351014	Odessa Gonzales	2700 Disney, Odessa	31.870253	-102.334756	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood
Odessa, TX	481351014	Odessa Gonzales	2700 Disney, Odessa	31.870253	-102.334756	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood
Odessa, TX	481350003	Odessa-Hays Elementary School	Barrett & Monahans Streets, Odessa	31.836575	-102.342037	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Highest Concentration	Neighborhood
Odessa, TX	481350003	Odessa-Hays Elementary School	Barrett & Monahans Streets, Odessa	31.836575	-102.342037	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Highest Concentration	Neighborhood
San Antonio, TX	480290059	Calaveras Lake	14620 Laguna Rd, San Antonio	29.275381	-98.311692	Rural	NO/NO2/NOx	SLAMS	Chemi-luminescence	Continuous	Source Oriented; Upwind Background	Urban Scale
San Antonio, TX	480290059	Calaveras Lake	14620 Laguna Rd, San Antonio	29.275381	-98.311692	Rural	O3	SLAMS	UV Photometric	Continuous	Source Oriented; Upwind Background	Urban Scale

Appendix B: Ambient Air Monitoring Network Site List

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San Antonio, TX	480290059	Calaveras Lake	14620 Laguna Rd, San Antonio	29.275381	-98.311692	Rural	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Population Exposure; Source Oriented	Urban Scale
San Antonio, TX	480290059	Calaveras Lake	14620 Laguna Rd, San Antonio	29.275381	-98.311692	Rural	SO2	SLAMS	Pulsed Fluorescence	Continuous	Population Exposure; Source Oriented	Neighborhood
San Antonio, TX	480290059	Calaveras Lake	14620 Laguna Rd, San Antonio	29.275381	-98.311692	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Source Oriented	Urban Scale
San Antonio, TX	480290059	Calaveras Lake	14620 Laguna Rd, San Antonio	29.275381	-98.311692	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Source Oriented	Urban Scale
San Antonio, TX	480290052	Camp Bullis	F Range (1000Yd marker off Wilderness Trail), Near Wilderness Rd, San Antonio	29.632058	-98.564936	Rural	NO/NO2/NOx	SPM	Chemi-luminescence	Continuous	Max Precursor Emissions Impact	Urban Scale
San Antonio, TX	480290052	Camp Bullis	F Range (1000Yd marker off Wilderness Trail), Near Wilderness Rd, San Antonio	29.632058	-98.564936	Rural	O3	SLAMS	UV Photometric	Continuous	Max Ozone Concentration; Population Exposure	Urban Scale
San Antonio, TX	480290052	Camp Bullis	F Range (1000Yd marker off Wilderness Trail), Near Wilderness Rd, San Antonio	29.632058	-98.564936	Rural	Solar Radiation	SPM	Photovoltaic	Continuous	Highest Concentration	Urban Scale
San Antonio, TX	480290052	Camp Bullis	F Range (1000Yd marker off Wilderness Trail), Near Wilderness Rd, San Antonio	29.632058	-98.564936	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Highest Concentration	Urban Scale
San Antonio, TX	480290052	Camp Bullis	F Range (1000Yd marker off Wilderness Trail), Near Wilderness Rd, San Antonio	29.632058	-98.564936	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Highest Concentration	Urban Scale
San Antonio, TX	480290060	Frank Wing Municipal Court	401 South Frio St, San Antonio	29.422183	-98.505381	Urban and Center City	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Population Exposure	Middle Scale
San Antonio, TX	480290677	Old Hwy 90	911 Old Hwy 90 West, San Antonio	29.423944	-98.580499	Urban and Center City	PM2.5 (TEOM)	SPM	TEOM Gravimetric	Continuous	Population Exposure	Neighborhood
San Antonio, TX	480290676	Palo Alto	9011 Poteet Jourdanton Hwy, San Antonio	29.332790	-98.551383	Urban and Center City	PM2.5 (TEOM)	SPM	TEOM Gravimetric	Continuous	Population Exposure	Neighborhood
San Antonio, TX	480290676	Palo Alto	9011 Poteet Jourdanton Hwy, San Antonio	29.332790	-98.551383	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
San Antonio, TX	480290676	Palo Alto	9011 Poteet Jourdanton Hwy, San Antonio	29.332790	-98.551383	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
San Antonio, TX	480291087	San Antonio Bulverde Parkway	3843 Bulverde Parkway,	29.635000	-98.417700	Suburban	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Population Exposure	Neighborhood
San Antonio, TX	480291087	San Antonio Bulverde Parkway	3843 Bulverde Parkway,	29.635000	-98.417700	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood
San Antonio, TX	480291087	San Antonio Bulverde Parkway	3843 Bulverde Parkway,	29.635000	-98.417700	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
San Antonio, TX	480291080	San Antonio Gardner Road	7145 Gardner Road, San Antonio	29.352911	-98.332814	Suburban	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood
San Antonio, TX	480291080	San Antonio Gardner Road	7145 Gardner Road, San Antonio	29.352911	-98.332814	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
San Antonio, TX	480291080	San Antonio Gardner Road	7145 Gardner Road, San Antonio	29.352911	-98.332814	Suburban	Wind (3m)	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
San Antonio, TX	480291069	San Antonio Interstate 35	9904 IH 35 N, San Antonio	29.529400	-98.391390	Urban and Center City	CO	Near-Road, SLAMS	Gas Filter Correlation	Continuous	Max Precursor Emissions Impact	Microscale
San Antonio, TX	480291069	San Antonio Interstate 35	9904 IH 35 N, San Antonio	29.529400	-98.391390	Urban and Center City	NO/NO2/NOx	Near-Road, SLAMS	Chemi-luminescence	Continuous	Max Precursor Emissions Impact	Microscale
San Antonio, TX	480291069	San Antonio Interstate 35	9904 IH 35 N, San Antonio	29.529400	-98.391390	Urban and Center City	PM2.5 (Beta)	Near-Road, SLAMS	Beta Attenuation	Continuous	Max Precursor Emissions Impact	Microscale
San Antonio, TX	480291069	San Antonio Interstate 35	9904 IH 35 N, San Antonio	29.529400	-98.391390	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Max Precursor Emissions Impact	Microscale
San Antonio, TX	480291069	San Antonio Interstate 35	9904 IH 35 N, San Antonio	29.529400	-98.391390	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Max Precursor Emissions Impact	Microscale
San Antonio, TX	480290032	San Antonio Northwest	6655 Bluebird Lane, San Antonio	29.515090	-98.620166	Suburban	NO/NO2/NOx	SLAMS	Chemi-luminescence	Continuous	Population Exposure	Neighborhood
San Antonio, TX	480290032	San Antonio Northwest	6655 Bluebird Lane, San Antonio	29.515090	-98.620166	Suburban	O3	SLAMS	UV Photometric	Continuous	Max Ozone Concentration; Population Exposure	Urban Scale
San Antonio, TX	480290032	San Antonio Northwest	6655 Bluebird Lane, San Antonio	29.515090	-98.620166	Suburban	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Population Exposure	Urban Scale
San Antonio, TX	480290032	San Antonio Northwest	6655 Bluebird Lane, San Antonio	29.515090	-98.620166	Suburban	PM2.5 (FRM)	QA Collocated, SLAMS	Sequential FRM Gravimetric	24 Hours; 1/12 Days	Quality Assurance	Urban Scale
San Antonio, TX	480290032	San Antonio Northwest	6655 Bluebird Lane, San Antonio	29.515090	-98.620166	Suburban	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Highest Concentration	Urban Scale
San Antonio, TX	480290032	San Antonio Northwest	6655 Bluebird Lane, San Antonio	29.515090	-98.620166	Suburban	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Highest Concentration	Urban Scale
Texarkana, TX- Texarkana, AR	480371031	Texarkana New Boston	2700 New Boston Rd, Texarkana	33.436111	-94.077780	Urban and Center City	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Population Exposure	Urban Scale
Texarkana, TX- Texarkana, AR	480371031	Texarkana New Boston	2700 New Boston Rd, Texarkana	33.436111	-94.077780	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Urban Scale
Texarkana, TX- Texarkana, AR	480371031	Texarkana New Boston	2700 New Boston Rd, Texarkana	33.436111	-94.077780	Urban and Center City	Wind (3m)	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Urban Scale

Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site ID	Site Name	Address - Location	Latitude	Longitude	Location Setting	Sampler Type	AQS Network & Monitor Type	Methods	Operating Schedule	Monitoring Objective	Spatial Scale
Tyler, TX	484230007	Tyler Airport Relocated	14790 County Road 1145, Tyler	32.344008	-95.415752	Rural	NO/NO2/NOx	SPM	Chemi-luminescence	Continuous	General-Background	Urban Scale
Tyler, TX	484230007	Tyler Airport Relocated	14790 County Road 1145, Tyler	32.344008	-95.415752	Rural	O3	SLAMS	UV Photometric	Continuous	General-Background	Urban Scale
Tyler, TX	484230007	Tyler Airport Relocated	14790 County Road 1145, Tyler	32.344008	-95.415752	Rural	Precipitation	SPM	Rain Gauge	Continuous	General-Background	Neighborhood
Tyler, TX	484230007	Tyler Airport Relocated	14790 County Road 1145, Tyler	32.344008	-95.415752	Rural	Solar Radiation	SPM	Photovoltaic	Continuous	General-Background	Neighborhood
Tyler, TX	484230007	Tyler Airport Relocated	14790 County Road 1145, Tyler	32.344008	-95.415752	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General-Background	Neighborhood
Tyler, TX	484230007	Tyler Airport Relocated	14790 County Road 1145, Tyler	32.344008	-95.415752	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General-Background	Neighborhood
Victoria, TX	484690003	Victoria	106 Mockingbird Lane, Victoria	28.836170	-97.005530	Urban and Center City	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood
Victoria, TX	484690003	Victoria	106 Mockingbird Lane, Victoria	28.836170	-97.005530	Urban and Center City	Solar Radiation	SPM	Photovoltaic	Continuous	Highest Concentration	Neighborhood
Victoria, TX	484690003	Victoria	106 Mockingbird Lane, Victoria	28.836170	-97.005530	Urban and Center City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Highest Concentration	Neighborhood
Victoria, TX	484690003	Victoria	106 Mockingbird Lane, Victoria	28.836170	-97.005530	Urban and Center City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Highest Concentration	Neighborhood
Waco, TX	483091037	Waco Mazanec	4472 Mazanec Rd, Waco	31.653036	-97.070678	Rural	CO	SLAMS	Gas Filter Correlation	Continuous	Upwind Background	Urban Scale
Waco, TX	483091037	Waco Mazanec	4472 Mazanec Rd, Waco	31.653036	-97.070678	Rural	O3	SLAMS	UV Photometric	Continuous	Upwind Background	Regional Scale
Waco, TX	483091037	Waco Mazanec	4472 Mazanec Rd, Waco	31.653036	-97.070678	Rural	PM2.5 (TEOM)	SPM	TEOM Gravimetric	Continuous	Regional Transport	Regional Scale
Waco, TX	483091037	Waco Mazanec	4472 Mazanec Rd, Waco	31.653036	-97.070678	Rural	SO2	SLAMS	Pulsed Fluorescence	Continuous	Upwind Background	Urban Scale
Waco, TX	483091037	Waco Mazanec	4472 Mazanec Rd, Waco	31.653036	-97.070678	Rural	Solar Radiation	SPM	Photovoltaic	Continuous	Regional Transport	Urban Scale
Waco, TX	483091037	Waco Mazanec	4472 Mazanec Rd, Waco	31.653036	-97.070678	Rural	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Regional Transport	Urban Scale
Waco, TX	483091037	Waco Mazanec	4472 Mazanec Rd, Waco	31.653036	-97.070678	Rural	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Regional Transport	Urban Scale

Appendix B: Ambient Air Monitoring Network Site List

Symbol/Acronym	Description
*	Granbury, Texas, is not a Metropolitan Statistical Area on the US Census Bureaus' list, but is designated as such in AQS, Granbury, Texas is located in Hood County, Texas and in the Dallas-Fort Worth-Arlington MSA
**	Monitor is not suitable for comparison against the annual PM _{2.5} NAAQS as described in 40 Code of Federal Regulations §58.30
***	Micropolitan Statistical Area
****	County is not a Metropolitan or Micropolitan Statistical Area
@	at
24-Hour Avg, 1/6 Days	1 24-Hour Average, Once every Sixth Day
24-Hour; 1/3 Days	1 24-Hour Sample, Once every Third Day
24-Hours, Daily	1 24-Hour Sample, Daily
24 1-Hour Avg; Daily	24 1-Hour Average, Daily
3 8-Hours; 1/3 Days (Jun - Aug)	8 3-Hour Samples, Once every Third Day from June through August
24-Hour; 1/6 Days	1 24-Hour Sample, Once every Sixth Day
AMNP	Annual Monitoring Network Plan
AQS	Air Quality System
AR	Arkansas
AutoGC	automated gas chromatograph
Border	The Border network designation is part of the SLAMS network for monitors within 100 kilometers of the United States/Mexico border.
CBSA	core based statistical area
CSN STN	Chemical Speciation Network Speciation Trends Network site (includes NCore monitors/requirements, samples analyzed by EPA contracted laboratory)
CSN Supplemental	Chemical Speciation Network supplemental speciation site (samples analyzed by TCEQ contracted laboratory)
CO	carbon monoxide
FM	Farm-to-Market
FRM	federal reference method
GC-MS	gas chromatograph mass spectrometry
Hi-Vol	High-Volume
Hwy	Highway
IH	Interstate Highway
MSA	metropolitan statistical area/micropolitan statistical area
NCore	National Core Multipollutant Monitoring Stations
NO ₂	nitrogen dioxide
NO/NO ₂ /NO _x	nitrogen oxides
NO _y	total reactive nitrogen
O ₃	ozone
OFW	Old Fort Worth

Appendix B: Ambient Air Monitoring Network Site List

Symbol/Acronym	Description
PAMS	Photochemical Assessment Monitoring Stations
PM ₁₀	particulate matter of 10 micrometers or less in diameter
PM _{10-2.5}	coarse particulate matter
PM _{2.5}	particulate matter of 2.5 micrometers or less in diameter
QA Collocated	quality assurance collocated monitor
SE	southeast
SETRPC	Southeast Texas Regional Planning Commission
SLAMS	State or Local Air Monitoring Stations
SO ₂	sulfur dioxide (one-hour and five-minute maximum monitors)
SPM	special purpose monitor
SVOC	semi-volatile organic compound
TCEQ	Texas Commission on Environmental Quality
TEOM	tapered element oscillating microbalance (not NAAQS comparable)
TSP (Pb)	total suspended particulate (lead)
TX	Texas
VOC	volatile organic compound
Wind	All wind sampler types produce data for parameters 61101, 61103, 61104, 61105, and 61106.

Appendix C

Population and Criteria Pollutant Monitor Status by Metropolitan Statistical Area

**Texas Commission on Environmental Quality
2020 Annual Monitoring Network Plan**



Appendix C: Population and Criteria Pollutant Monitor Status by Metropolitan Statistical Area⁶

Texas Metropolitan Statistical Area	2018 Population Estimate ²	NO ₂ and NO/NO _y Required ⁵	NO ₂ and NO/NO _y Existing ^{1,5}	SO ₂ Required ⁵	SO ₂ Existing ^{1,5}	Pb Required ¹	Pb Existing ¹	O ₃ Required	O ₃ Existing	CO Required ⁵	CO Existing ^{1,5}	PM ₁₀ Required ¹	PM ₁₀ Existing ¹	PM _{2.5} Required ¹	PM _{2.5} Existing ¹
Dallas-Fort Worth-Arlington	7,539,711	6	17	2	3	3	3	4	19	2	2	2-4	2	7	13
Houston-The Woodlands-Sugar Land	6,997,384	6	19	3	5	0	0	4	20	2	3	2-4	5	8	13
San Antonio-New Braunfels	2,518,036	3	4	2	2	0	0	2	3	1	1	2-4	2	3	5
Austin-Round Rock	2,168,316	2	2	0	1	0	0	2	2	1	1	2-4	2	3	3
McAllen-Edinburg-Mission	865,939	0	0	0	0	0	0	1	1	0	0	1-2	2	2	2
El Paso	845,553	2	4	1	1	0	2	3	6	1	3	2-4	5	5	8
Corpus Christi	452,950	0	0	0	3	0	0	2	2	0	0	0-1	1	0	4
Killeen-Temple	451,679	0	1	0	0	0	0	2	2	0	0	0-1	0	0	1
Brownsville-Harlingen	423,908	0	0	0	0	0	0	1	1	0	0	0-1	0	0	2
Beaumont-Port Arthur	409,526	1	4	3	4	0	0	2	7	0	0	0-1	0	0	3
Lubbock	319,068	0	0	0	0	0	0	0	0	0	0	0-1	0	0	1
Laredo	275,910	0	0	0	0	0	0	0	1	0	1	0-1	2	0	1
Waco	271,942	0	0	0	1	0	0	1	1	0	1	0-1	0	0	1
Amarillo	265,947	0	0	1	2	0	0	0	0	0	0	0-1	0	0	1
College Station-Bryan	262,431	0	0	1	1	0	0	0	0	0	0	0-1	0	0	1
Tyler	230,221	0	1	0	0	0	0	1	1	0	0	0	0	0	0
Longview	219,417	0	1	1	2	0	0	1	1	0	0	0	0	0	0
Midland	178,331	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Abilene	171,451	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odessa	162,124	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Wichita Falls	151,306	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Texarkana	150,242	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Sherman-Denison	133,991	0	0	0	0	0	0	0	0	0	0	0	0	0	0
San Angelo	119,711	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Victoria	99,619	0	0	0	0	0	0	1	1	0	0	0	0	0	0
Marshall ³	66,726	0	1	1	1	0	0	0	1	0	0	0	0	0	3
Eagle Pass ³	58,485	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Corsicana ³	49,565	0	1	1	1	0	0	0	1	0	0	0	0	0	1
Big Spring ³	37,847	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Mount Pleasant ³	33,033	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Kingsville ³	31,571	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Borger ³	21,198	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Milam County ⁴	not available	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Freestone County ⁴	not available	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Big Bend National Park ⁴	not available	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Totals³		20	55	20	32	3	5	27	70	7	12	11-31	21	28	68

¹Individual monitors may fulfill multiple requirements and are only counted once. Collocated quality control monitors are not included in totals.

²United States Census Bureau population estimates as of July 1, 2018, link below

³Area is classified as a micropolitan statistical area and not subject to SLAMS requirements.

⁴Area not classified as a metropolitan or micropolitan statistical area, county population data is not applicable.

⁵Required and existing counts include NO_x, high-sensitivity SO₂, and high-sensitivity CO monitors.

⁶Planned required monitor deployment is discussed in the applicable AMNP section.

CO - carbon monoxide

NO₂ and NO/NO_y - nitrogen dioxide, nitrogen oxide, and total reactive nitrogen compounds

Pb - lead

PM₁₀ - particulate matter of 10 micrometers or less

PM_{2.5} - particulate matter of 2.5 micrometers or less

O₃ - ozone

SO₂ - sulfur dioxide

Appendix D

Nitrogen Dioxide, Nitrogen Oxide, and Total Reactive Nitrogen Monitor Status

Texas Commission on Environmental Quality
2020 Annual Monitoring Network Plan



Appendix D: Nitrogen Dioxide, Nitrogen Oxide, and Total Reactive Nitrogen Monitor Status

Core Based Statistical Areas	2018 Population Estimate ¹	Required NO ₂ Area-Wide Monitors	Required NO ₂ RA-40 Monitors	Required NO ₂ Near-Road Monitors	Required True NO ₂ PAMS Monitors	Required NO/NO _y PAMS/NCore Monitors	Total Required NO ₂ and NO/NO _y Monitors	Total Existing NO ₂ and NO/NO _y Monitors ²
Dallas-Fort Worth-Arlington	7,539,711	1	1	2	1	1	6	17
Houston-The Woodlands-Sugar Land	6,997,384	1	1	2	1	1	6	19
San Antonio-New Braunfels	2,518,036	1	0	2	0	0	3	4
Austin-Round Rock	2,168,316	1	0	1	0	0	2	2
McAllen-Edinburg-Mission	865,939	0	0	0	0	0	0	0
El Paso	845,553	0	1	0	0	1	2	4
Corpus Christi	452,950	0	0	0	0	0	0	0
Killeen-Temple	451,679	0	0	0	0	0	0	1
Brownsville-Harlingen	423,908	0	0	0	0	0	0	0
Beaumont-Port Arthur	409,526	0	1	0	0	0	1	4
Lubbock	319,068	0	0	0	0	0	0	0
Laredo	275,910	0	0	0	0	0	0	0
Waco	271,942	0	0	0	0	0	0	0
Amarillo	265,947	0	0	0	0	0	0	0
College Station-Bryan	262,431	0	0	0	0	0	0	0
Tyler	230,221	0	0	0	0	0	0	1
Longview	219,417	0	0	0	0	0	0	1
Midland	178,331	0	0	0	0	0	0	0
Abilene	171,451	0	0	0	0	0	0	0
Odessa	162,124	0	0	0	0	0	0	0
Wichita Falls	151,306	0	0	0	0	0	0	0
Texarkana	150,242	0	0	0	0	0	0	0
Sherman-Denison	133,991	0	0	0	0	0	0	0
San Angelo	119,711	0	0	0	0	0	0	0
Victoria	99,619	0	0	0	0	0	0	0
Marshall ³	66,726	0	0	0	0	0	0	1
Corsicana ³	49,565	0	0	0	0	0	0	1
Totals		4	4	7	2	3	20	55

¹United States Census Bureau population estimates as of July 1, 2018.

²Monitors may fulfill multiple monitoring requirements and are only counted once.

³Area is classified as a micropolitan statistical area and not subject to SLAMS requirements.

NCore - National Core Multipollutant Monitoring Stations

NO - nitrogen oxide

NO₂ - nitrogen dioxide

NO_y - total reactive nitrogen compounds

PAMS - Photochemical Assessment Monitoring Stations

RA-40 - Regional Administrator 40

Appendix E

Sulfur Dioxide Monitor Status

**Texas Commission on Environmental Quality
2020 Annual Monitoring Network Plan**



Appendix E: Sulfur Dioxide Monitor Status

Core Based Statistical Area	County	2018 Population Estimates ¹	2018 Point Source (tpy)	2017 NEI Data (tpy)	2017 Point Source Data (tpy)	2017 NEI Non-Point Source Data with 2018 Point Source Data (tpy)	PWEI	Required SO ₂ PWEI Monitors	Required SO ₂ DRR Monitors	Required SO ₂ NCore Monitors (high-sensitivity)	Total Required SO ₂ Monitors	Existing Monitors ²
Dallas-Fort Worth-Arlington		7,539,711				4,515	34,042	1	0	1	2	3
	Collin		21	104	6	119						
	Dallas		361	921	347	935						
	Denton		362	69	340	91						
	Ellis		1,875	1,659	1,561	1,973						
	Hunt		1	35	1	35						
	Kaufman		135	122	91	166						
	Rockwall		0	9	0	9						
	Johnson		76	105	78	103						
	Parker		92	256	234	114						
	Tarrant		26	909	23	913						
	Wise		13	24	9	28						
	Hood		22	23	18	28						
	Somervell		0	1	0	1						
Houston-The Woodlands-Sugar Land		6,997,384				49,706	347,812	2	0	1	3	5
	Austin		34	42	32	43						
	Brazoria		588	681	585	683						
	Chambers		112	203	191	125						
	Fort Bend		38,298	37,802	37,736	38,365						
	Galveston		1,363	2,382	1,819	1,925						
	Harris		7,198	8,667	7,546	8,319						
	Liberty		11	39	15	35						
	Montgomery		36	181	23	193						
	Waller		2	17	1	18						
San Antonio-New Braunfels		2,518,036				30,657	77,195	1	1	0	2	2
	Atascosa		12,132	9,316	8,779	12,669						
	Bandera		0	2	0	2						
	Bexar		16,895	13,007	12,724	17,178						
	Comal		351	428	407	372						
	Guadalupe		121	144	109	156						
	Kendall		2	7	2	8						
	Medina		0	10	0	10						
	Wilson		101	270	109	262						
Austin-Round Rock		2,168,316				2,102	4,557	0	0	0	0	1
	Bastrop		257	305	292	270						
	Caldwell		0	354	338	16						
	Hays		1,361	1,189	1,164	1,385						
	Travis		133	359	119	373						
	Williamson		5	57	5	57						
McAllen-Edinburg-Mission		865,939				128	111	0	0	0	0	0
	Hidalgo		46	125	42	128						

Appendix E: Sulfur Dioxide Monitor Status

Core Based Statistical Area	County	2018 Population Estimates ¹	2018 Point Source (tpy)	2017 NEI Data (tpy)	2017 Point Source Data (tpy)	2017 NEI Non-Point Source Data with 2018 Point Source Data (tpy)	PWEI	Required SO ₂ PWEI Monitors	Required SO ₂ DRR Monitors	Required SO ₂ NCore Monitors (high-sensitivity)	Total Required SO ₂ Monitors	Existing Monitors ²
El Paso		845,553				373	315	0	0	1	1	1
	El Paso		255	390	282	363						
	Hudspeth		7	10	7	10						
Corpus Christi		452,950				1,003	454	0	0	0	0	3
	Aransas		0	49	0	49						
	Nueces		733	828	689	872						
	San Patricio		28	82	28	82						
Killeen-Temple		451,679				129	58	0	0	0	0	0
	Bell		64	96	43	117						
	Coryell		0	7	0	7						
	Lampasas		0	4	0	4						
Brownsville-Harlingen		423,908				83	35	0	0	0	0	0
	Cameron		1	83	1	83						
Beaumont-Port Arthur		409,526				20,520	8,403	1	2	0	3	4
	Hardin		1	12	1	12						
	Jefferson		13,951	14,002	13,849	14,105						
	Orange		6,338	6,340	6,300	6,378						
	Newton		16	22	14	25						
Lubbock		319,068				91	29	0	0	0	0	0
	Crosby		0	4	0	3						
	Lubbock		12	57	4	65						
	Lynn		0	23	0	23						
Laredo		275,910				3,994	1,102	0	0	0	0	0
	Webb		348	584	390	541						
Waco		271,942				3,453	939	0	0	0	0	1
	McLennan		3,365	3,181	3,100	3,446						
	Falls		0	7	0	7						
Amarillo		265,947				12,768	3,396	0	1	0	1	2
	Armstrong		1	1	0	2						
	Carson		0	4	0	4						
	Potter		12,437	13,106	12,937	12,606						
	Randall		119	117	93	142						
	Oldham		0	14	0	14						
College Station-Bryan		262,431				10,213	2,680	0	1	0	1	1
	Brazos		11	57	12	56						
	Burleson		0	8	0	8						
	Robertson		10,142	11,254	11,248	10,148						
Tyler		230,221				552	127	0	0	0	0	0
	Smith		506	534	488	552						

Appendix E: Sulfur Dioxide Monitor Status

Core Based Statistical Area	County	2018 Population Estimates ¹	2018 Point Source (tpy)	2017 NEI Data (tpy)	2017 Point Source Data (tpy)	2017 NEI Non-Point Source Data with 2018 Point Source Data (tpy)	PWEI	Required SO ₂ PWEI Monitors	Required SO ₂ DRR Monitors	Required SO ₂ NCore Monitors (high-sensitivity)	Total Required SO ₂ Monitors	Existing Monitors ²
Longview		219,417				56,436	12,383	1	0	0	1	2
	Gregg		23	68	23	67						
	Rusk		56,338	36,599	36,578	56,360						
	Upshur		2	8	1	9						
Midland		178,331				1,354	242	0	0	0	0	0
	Martin		18	494	27	485						
	Midland		164	882	177	869						
Abilene		171,451				53	9	0	0	0	0	0
	Callahan		0	3	0	3						
	Jones		10	13	9	13						
	Taylor		0	37	0	37						
Odessa		162,124				1,627	264	0	0	0	0	0
	Ector		1,171	1,484	1,028	1,627						
Wichita Falls		151,306				697	105	0	0	0	0	0
	Archer		0	2	0	2						
	Clay		62	50	47	65						
	Wichita		512	606	526	592						
Texarkana		150,242				38	6	0	0	0	0	0
	Bowie		19	34	15	38						
Sherman-Denison		133,991				46	6	0	0	0	0	0
	Grayson		8	45	7	46						
San Angelo		119,711				269	32	0	0	0	0	0
	Irion		0	237	0	237						
	Sterling		1	10	1	10						
	Tom Green		2	21	2	22						
Victoria		99,619				13,607	1,356	0	0	0	0	0
	Goliad		13,354	12,365	12,202	13,517						
	Victoria		36	85	31	90						
Marshall ³		66,726				5,359	358	NA	1	0	1	1
	Harrison		5,334	4,389	4,363	5,359						
Corsicana ³		49,565				3,750	186	NA	1	0	1	1
	Navarro		3,730	3,812	3,792	3,750						
Big Spring ³		37,847				6,511	246	NA	1	0	1	1
	Glasscock		79	455	254	280						
	Howard		5,742	6,835	6,346	6,231						

Appendix E: Sulfur Dioxide Monitor Status

Core Based Statistical Area	County	2018 Population Estimates ¹	2018 Point Source (tpy)	2017 NEI Data (tpy)	2017 Point Source Data (tpy)	2017 NEI Non-Point Source Data with 2018 Point Source Data (tpy)	PWEI	Required SO ₂ PWEI Monitors	Required SO ₂ DRR Monitors	Required SO ₂ NCore Monitors (high-sensitivity)	Total Required SO ₂ Monitors	Existing Monitors ²
Mount Pleasant ³		33,033				14,245	471	NA	1	0	1	1
	Titus		14,223	43,509	43,487	14,245						
Borger ³		21,198				10,080	214	NA	1	0	1	1
	Hutchinson		10,071	11,657	11,648	10,080						
None		not available					NA	NA	NA	0	0	NA
	Freestone ⁴		6,674	47,653	47,645	6,681			0	0	0	1
	Milam ⁴		568	19,908	19,900	577			1	0	1	1
Total Monitors								6	11	3	20	32

¹United States Census Bureau population estimates as of July 1, 2018.

²Monitors may fulfill multiple monitoring requirements and are only counted once.

³Metropolitan statistical area

⁴Area not classified as a metropolitan or micropolitan statistical area.

DRR - Data Requirements Rule

NA - not applicable

NCore - National Core Multipollutant Monitoring Stations

NEI - National Emissions Inventory

PWEI - population weighted emission index (Core Based Statistical Area Population*[2017 NEI non-point source data and 2018 point source data]/1,000,000)

SO₂ - sulfur dioxide

tpy - tons per year

Appendix F

Sulfur Dioxide Ongoing Data Requirements Annual Report

**Texas Commission on Environmental Quality
2020 Annual Monitoring Network Plan**



Appendix F: Sulfur Dioxide Ongoing Data Requirements Annual Report

As required by 40 Code of Federal Regulations (CFR) §51.1205(b), this report provides the Texas Commission on Environmental Quality's (TCEQ) annual assessment of sulfur dioxide (SO₂) emissions changes for areas designated attainment/unclassifiable for the 2010 SO₂ National Ambient Air Quality Standard (NAAQS), where the designations were based on modeling actual SO₂ emissions.

Out of the 245 Texas counties (or portions of counties) currently designated attainment/unclassifiable for the 2010 SO₂ NAAQS, the seven counties shown in Table 1 were designated based on modeled actual SO₂ emissions. Table 1 lists the most recent (2018) quality assured data available showing total estimated SO₂ emissions from the relevant sources in each county. The table includes emissions from the previous year (2017), the change in SO₂ emissions from 2017 to 2018, and the cause for any emissions increase.

The relevant sources in Lamb, Limestone, and Robertson counties had emissions decreases from the previous year. Since the emissions have decreased for these locations, the original designations modeling provides reasonable assurance that these areas continue to meet the 2010 one-hour SO₂ primary NAAQS.

The relevant sources in Atascosa, Fort Bend, Goliad, and Wilbarger counties had emissions increases from the previous year. Table 2 shows the average SO₂ emissions data used in the designations modeling for the four relevant sources, determined from 2013-2015 emissions data for Oklaunion Power Station in Wilbarger County and from 2012-2014 emissions data for the remaining three sources.

Table 2 also shows the average emissions data for 2016-2018, which is the data that would likely be used if additional modeling would be required to assess compliance with the SO₂ NAAQS. The comparison of these datasets shows that the original designation modeling evaluated higher average emissions for Fort Bend, Goliad, and Wilbarger counties, providing reasonable assurance that these three areas continue to meet the 2010 one-hour SO₂ primary NAAQS. For Atascosa County, although the comparison shows that the 2016-2018 average emissions data exceeds the average of the 2012-2014 emissions data used for designation modeling by 151 tons per year, this small increase of approximately 1.7 percent of SO₂ emissions would not be expected to change the attainment/unclassifiable designation determined from the original modeling.

The TCEQ recommends that no additional SO₂ air quality modeling is needed to determine compliance with the 2010 SO₂ NAAQS for any of the seven Texas counties listed in Table 1.

Table 1: 2017 to 2018 Emissions Comparisons

County	Relevant Source	2017 SO ₂ (tpy)	2018 SO ₂ (tpy)	Difference 2017 to 2018	Cause for Emission Increase
Atascosa	San Miguel Electric Plant	8,584	11,880	3,296	Increased operation
Fort Bend	W.A. Parish Electric Generating Station	37,651	38,165	514	Increased operation from some units

Appendix F: Sulfur Dioxide Ongoing Data Requirements Annual Report

County	Relevant Source	2017 SO ₂ (tpy)	2018 SO ₂ (tpy)	Difference 2017 to 2018	Cause for Emission Increase
Goliad	Coleto Creek Power Station	12,202	13,213	1,011	Increased operation
Lamb	Tolk Station Power Plant	13,625	9,958	-3,667	NA
Limestone	Limestone Electric Generating Station	10,240	8,320	-1,920	NA
Robertson	Twin Oaks Power Station	2,472	2,523	-3,328	NA
Wilbarger	Oklunion Power Station	988	2,191	1,204	Increased operation

NA - not applicable
SO₂ - sulfur dioxide
tpy - tons per year

Table 2: Average Emissions Comparison

County	Relevant Source	2012-2014 SO ₂ Average (tpy)	2016-2018 SO ₂ Average (tpy)	Three Year Average SO ₂ Comparison Change
Atascosa	San Miguel Electric Plant	8,942	9,093	151
Fort Bend	W.A. Parish Electric Generating Station	41,520	36,651	-4,869
Goliad	Coleto Creek Power Station	15,832	11,215	-4,617
Wilbarger	Oklunion Power Station	2,932*	1,570	-1,362

*2013-2015 SO₂ emissions inventory average utilized in designations modeling
SO₂ - sulfur dioxide
tpy - tons per year

Appendix G

Total Suspended Particulate Lead Monitor Status

**Texas Commission on Environmental Quality
2020 Annual Monitoring Network Plan**



Appendix G: Total Suspended Particulate Lead Monitor Status

Metropolitan Statistical Area	County	Pb Source (Facility Name)	2018 Pb Source Emissions (tpy)	2017 Pb Source Emissions (tpy)	2016 Pb Source Emissions (tpy)	Site Name	Required Monitors ¹	Existing Monitors ¹
Dallas-Fort Worth- Arlington							3	3
	Collin	Maintenance Area	NA	NA	NA	Frisco Eubanks ^{1,2}	1	1
	Collin	Maintenance Area	NA	NA	NA	Frisco Stonebrook ²	1	1
	Kaufman	Conecsus, LLC	0.2812	0.2617	0.3401	Terrell Temtex ¹	1	1
El Paso							0	2
	El Paso	None	NA	NA	NA	El Paso UTEP	0	1
	El Paso	None	NA	NA	NA	Ojo De Agua	0	1
Totals							3	5

¹Collocated quality control monitors are not included in totals.

²Monitor required to fulfill State Implementation Plan commitments.

LCC - Limited Liability Company

NA - not applicable

Pb - lead

tpy - tons per year

UTEP - University of Texas at El Paso

Appendix H

Ozone Monitor Status

**Texas Commission on Environmental Quality
2020 Annual Monitoring Network Plan**



Appendix H: Ozone Monitor Status

Metropolitan Statistical Area	2018 Population Estimates ¹	2016 2018 8 Hour Design Value (ppm)	Design Value as Percent of NAAQS ²	Total Required SLAMS Monitors	Total Required NCore/PAMS Monitors	Total Required Monitors ³	Total Existing Monitors ⁴
Dallas-Fort Worth-Arlington	7,539,711	0.076	109%	3	1	4	19
Houston-The Woodlands-Sugar Land	6,997,384	0.078	111%	3	1	4	20
San Antonio-New Braunfels	2,518,036	0.072	103%	2	0	2	3
Austin-Round Rock	2,168,316	0.068	97%	2	0	2	2
McAllen-Edinburg-Mission	865,939	0.055	79%	1	0	1	1
El Paso	845,553	0.073	104%	2	1	3	6
Corpus Christi	452,950	0.061	87%	2	0	2	2
Killeen-Temple	451,679	0.068	97%	2	0	2	2
Brownsville-Harlingen	423,908	0.057	81%	1	0	1	1
Beaumont-Port Arthur	409,526	0.067	96%	2	0	2	7
Lubbock	319,068	NA	NA	0	0	0	0
Laredo	275,910	0.053	76%	0	0	0	1
Waco	271,942	0.064	91%	1	0	1	1
Amarillo	265,947	NA	NA	0	0	0	0
College Station-Bryan	262,431	NA	NA	0	0	0	0
Tyler	230,221	0.065	93%	1	0	1	1
Longview	219,417	0.065	93%	1	0	1	1
Midland	178,331	NA	NA	0	0	0	0
Abilene	171,451	NA	NA	0	0	0	0
Odessa	162,124	NA	NA	0	0	0	0
Wichita Falls	151,306	NA	NA	0	0	0	0
Texarkana	150,242	NA	NA	0	0	0	0
Sherman-Denison	133,991	NA	NA	0	0	0	0
San Angelo	119,711	NA	NA	0	0	0	0
Victoria	99,619	0.064	91%	1	0	1	1
Marshall ⁵	66,726	0.061	87%	0	0	0	1
Corsicana ⁵	49,565	0.064	91%	0	0	0	1
Totals				24	3	27	70

¹United States Census Bureau population estimates as of July 1, 2018.

²2015 eight-hour ozone National Ambient Air Quality Standard (NAAQS) is 0.070 parts per million (ppm).

³Total Required Monitors is a sum of requirements for SLAMS, PAMS, and NCore.

⁴Monitors may fulfill multiple monitoring requirements and are only counted once.

⁵Area is classified as a micropolitan statistical area and is not subject to SLAMS requirements.

NA - not applicable

NCore - National Core Multipollutant Monitoring Stations

PAMS - Photochemical Assessment Monitoring Stations

SLAMS - State or Local Air Monitoring Stations

Appendix I

Carbon Monoxide Monitor Status

**Texas Commission on Environmental Quality
2020 Annual Monitoring Network Plan**



Appendix I: Carbon Monoxide Monitor Status

Core Based Statistical Area ⁵	2018 Population Estimates ¹	Site Name	Required CO NCore Monitors	Required CO Near-Road Monitors	Total Required Monitors ⁴	Total Existing Monitors ²
Dallas-Fort Worth-Arlington	7,539,711				2	2
		Dallas Hinton ³	1	0	1	1
		Fort Worth California Parkway	0	1	1	1
Houston-The Woodlands-Sugar Land	6,997,384				2	3
		Clinton ³	0	0	0	1
		Houston Deer Park #2 ³	1	0	1	1
		Houston North Loop	0	1	1	1
San Antonio-New Braunfels	2,518,036				1	1
		San Antonio Interstate 35	0	1	1	1
Austin-Round Rock	2,168,316				1	1
		Austin North Interstate 35	0	1	1	1
El Paso	845,553				1	3
		El Paso Chamizal ³	1	0	1	1
		El Paso UTEP	0	0	0	1
		Ojo De Agua	0	0	0	1
Laredo	275,910				0	1
		Laredo Vidaurri	0	0	0	1
Waco	271,942				0	1
		Waco Mazanec	0	0	0	1
Totals			3	4	7	12

¹United States Census Bureau population estimates as of July 1, 2018.

²Monitors may fulfill multiple monitoring requirements and are only counted once.

³High-Sensitivity CO monitor (high-sensitivity CO monitors are recommended at NCore sites) ⁴Total Required Monitors is a sum of requirements for NCore and Near-Road.

⁵This list does not include metropolitan statistical areas with zero requirements and zero monitors.
- number

CO - carbon monoxide

NCore - National Core Multipollutant Monitoring Stations

UTEP - University of Texas at El Paso

2020 Annual Monitoring Network Plan

Appendix J

Particulate Matter of 10 Micrometers or Less Monitor Status

**Texas Commission on Environmental Quality
2020 Annual Monitoring Network Plan**



Appendix J: Particulate Matter of 10 Micrometers or Less Monitor Status

Table 1: Particulate Matter of 10 Micrometers or Less Monitoring Requirements and Monitor Locations

Metropolitan Statistical Area	2018 Population Estimates ¹	Site Name	2016 2018 Maximum Concentration (µg/m ³)	Percent of NAAQS ² (%)	Required Monitors ³	Existing Monitors ³
Dallas-Fort Worth-Arlington	7,539,711				2-4	2
		Earhart	83	55		
		Convention Center (collocated pair)	102	68		
Houston-The Woodlands-Sugar Land	6,997,384				2-4	5
		Clinton (collocated pair)	111	74		
		Houston Monroe	97	65		
		Houston Westhollow	95	63		
		Lang	101	67		
		Texas City Fire Station	105	70		
San Antonio-New Braunfels	2,518,036				2-4	2
		San Antonio Bulverde Parkway ⁴ (previously Selma)	NA	NA		
		Frank Wing Municipal Court	117	78		
Austin-Round Rock	2,168,316				2-4	2
		Austin Webberville Road	97	65		
		Austin Audubon Society	90	60		
McAllen-Edinburg-Mission	865,939				1-2	2
		Mission	93	62		
		Edinburg East Freddy Gonzalez Drive	90	60		
El Paso	845,553				2-4	5
		El Paso Mimosa (previously Riverside)	126	84		
		Ivanhoe	85	57		
		Ojo De Agua (collocated pair)	137	91		
		Socorro Hueco (collocated pair)	114	76		
		Van Buren	134	89		
Corpus Christi	452,950				0-1	1
		Dona Park	84	56		
Laredo	275,910				0-1	2

Appendix J: Particulate Matter of 10 Micrometers or Less Monitor Status

Table 1: Particulate Matter of 10 Micrometers or Less Monitoring Requirements and Monitor Locations

Metropolitan Statistical Area	2018 Population Estimates ¹	Site Name	2016 2018 Maximum Concentration ($\mu\text{g}/\text{m}^3$)	Percent of NAAQS ² (%)	Required Monitors ³	Existing Monitors ³
		Laredo Vidaurri	81	54		
		Laredo Bridge	75	50		
Killeen-Temple	451,679		NA	0	0-1	0
Brownsville-Harlingen	423,908		NA	0	0-1	0
Beaumont-Port Arthur	409,526		NA	0	0-1	0
Lubbock	319,068		NA	0	0-1	0
Waco	271,942		NA	0	0-1	0
Amarillo	265,947		NA	0	0-1	0
College Station-Bryan	262,431		NA	0	0-1	0
Totals					11-31	21

¹United States Census Bureau population estimates as of July 1, 2018.

²Current PM₁₀ NAAQS is 150 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

³Collocated quality control monitors are not counted.

⁴Monitor deployed at site with new identification numbers, incomplete design values are not used for regulatory compliance.

This list doesn't include metropolitan statistical areas with zero requirements and zero monitors.

% - percent

NAAQS - National Ambient Air Quality Standards

PM₁₀ - particulate matter of 10 micrometers or less

Appendix J: Particulate Matter of 10 Micrometers or Less Monitor Status

Table 2: Particulate Matter of 10 Micrometers or Less Monitor Concentrations

Site Name	2016-2018 Maximum Concentration (µg/m³)	2018 Annual Mean Concentration (µg/m³)	2017 Annual Mean Concentration (µg/m³)	2016 Annual Mean Concentration (µg/m³)
Socorro Hueco (collocated pair)	114	34.4*	32.1*	24.5*
Van Buren	134	30.6*	20.4	14.0
El Paso Mimosa (previously Riverside)	126	29.3*	27.8*	22.8
Clinton (collocated pair)	111	29.2*	27.4*	44.4*
Laredo Vidaurri	81	25.1*	22.0*	19.6
Edinburg East Freddy Gonzalez Drive	90	24.9*	22.9*	22.2
Ojo De Agua (collocated pair)	137	24.8*	21.3	23.6
Mission	93	24.8*	24.8*	26.3*
Convention Center (collocated pair)	102	24.6	20.9	24.0*
Earhart	83	23.8	23.6*	24.1*
Houston Monroe	97	22.9	21.4	25.2*
Austin Webberville Road	97	22.6	22.0*	23.6
Lang	101	22.2	21.2	25.1*
Laredo Bridge	75	21.9	18.7	19.5
Frank Wing Municipal Court	117	20.8	21.7	21.9
Ivanhoe	85	20.7	19.4	18.6
Texas City Fire Station	105	20.6	13.6	18.5
Dona Park	84	20.3	19.9	23.3
Austin Audubon Society	90	17.5	14.8	16.8
Houston Westhollow	95	16.5	16.2	20.6
San Antonio Bulverde Parkway** (previously Selma)	NA	NA	NA	NA

*Highest concentrations ranked for 33% of sites, ensuring at least half of collocation monitoring at network sites among the highest.

**Monitor with new identification numbers deployed at site. As a result, there is not enough data to calculate design values. Incomplete design values are not used for regulatory compliance.

Appendix K

Particulate Matter of 2.5 Micrometers or Less Monitor Status

**Texas Commission on Environmental Quality
2020 Annual Monitoring Network Plan**



Appendix K: Particulate Matter of 2.5 Micrometers or Less Monitor Status

Table 1: Particulate Matter of 2.5 Micrometers or Less Monitor Status

Metropolitan Statistical Area	2018 Population Estimates ¹	2016-2018 DV (µg/m ³) Annual (for Area)	2016-2018 DV (µg/m ³) 24-Hour (for Area)	Percent of NAAQS Annual ² (for Area)	Percent of NAAQS 24-Hour ³ (for Area)	Required FRM/FEM Monitors	Required NCore Monitors	Required Near Road Monitors ²	Total Required Monitors ⁴	Total Existing Monitors ⁴
Dallas-Fort Worth-Arlington	7,539,711	8.9	20	74	57	2	4	1	7	13
Houston-The Woodlands-Sugar Land	6,997,384	10.2	25	85	71	3	4	1	8	13
San Antonio-New Braunfels	2,518,036	8.1	24	68	69	2	0	1	3	5
Austin-Round Rock	2,168,316	9.8	22	82	63	2	0	1	3	3
McAllen-Edinburg-Mission	865,939	10.7	28	89	80	2	0	0	2	2
El Paso	845,553	9.1	24	76	69	1	4	0	5	8
Corpus Christi	452,950	9.1	25	76	71	0	0	0	0	4
Killeen-Temple ⁵	451,679	NA	NA	NA	NA	0	0	0	0	1
Brownsville-Harlingen	423,908	9.9	25	83	71	0	0	0	0	2
Beaumont-Port Arthur ⁵	409,526	NA	NA	NA	NA	0	0	0	0	3
Lubbock ⁵	319,068	NA	NA	NA	NA	0	0	0	0	1
Laredo ⁵	275,910	NA	NA	NA	NA	0	0	0	0	1
Waco	271,942	NA	NA	NA	NA	0	0	0	0	1
Amarillo ⁵	265,947	NA	NA	NA	NA	0	0	0	0	1
College Station-Bryan	262,431	NA	NA	NA	NA	0	0	0	0	1
Odessa ⁵	162,124	NA	NA	NA	NA	0	0	0	0	1
Texarkana	150,242	8.9	19	74	54	0	0	0	0	1
Marshall ⁶	66,726	8.5	18	71	51	0	0	0	0	3
Eagle Pass ^{5,6}	58,485	NA	NA	NA	NA	0	0	0	0	1
Corsicana ⁶	49,565	NA	NA	NA	NA	0	0	0	0	1
Kingsville ⁶	31,571	NA	NA	NA	NA	0	0	0	0	1
Big Bend National Park ^{5,7}	not available	NA	NA	NA	NA	0	0	0	0	1
Totals*						12	12	4	28	68

¹United States Census Bureau population estimates as of July 1, 2018.

²Current PM_{2.5} Annual NAAQS is 12 micrograms per cubic meter (µg/m³).

³Current PM_{2.5} 24-hour NAAQS is 35 µg/m³.

⁴Individual monitors may fulfill multiple requirements and are only counted once. Collocated quality control monitors are not included in totals.

⁵Annual values do not meet completeness criteria; monitors deployed in 2017, 2018, or 2019. Incomplete design value information is not used for the purposes of regulatory compliance.

⁶Area is classified as a micropolitan statistical area and is not subject to SLAMS requirements.

⁷Area not classified as a metropolitan or micropolitan statistical area.

This list does not include metropolitan statistical areas with no requirement and no monitors.

DV - design value

FEM - federal equivalent method

FRM - federal reference method

NA - not applicable

NAAQS - National Ambient Air Quality Standards

Appendix K: Particulate Matter of 2.5 Micrometers or Less Monitor Status

Table 2: Particulate Matter of 2.5 Micrometers or Less Monitor Locations and Method Codes¹¹

Metropolitan Statistical Area	2018 Population Estimates ¹	Site Name	Method Code(s)	2016-2018 Annual DV ($\mu\text{g}/\text{m}^3$)	2016-2018 24-Hour DV ($\mu\text{g}/\text{m}^3$)	Percent of NAAQS (Annual ²)	Percent of NAAQS (24-Hour ³)	Required SLAMS FRM/FEM Monitor ⁴	Continuous Monitor ¹⁰	Continuous Requirement Met ¹⁰	Required NCore Monitor	Required Near-Road Monitor	Total Required Monitors ⁴	Total Existing Monitors ⁴
Dallas-Fort Worth-Arlington	7,539,711			8.9	20	74	57	2	7	Y	4	1	7	13
		Convention Center	145	8.9	19	74	54	1	0		0	0	1	1
		Dallas Hinton (collocated pair)	145, (145), 170, 185, [810, 811, 812, 838] ⁵	8.9	20	74	57	0	1		4	0	4	4
		Denton Airport South	209	NA	NA	NA	NA	0	1		0	0	0	1
		Fort Worth California Parkway North	209, (209)	8.6	18	72	51	0	1		0	1	1	1
		Fort Worth Northwest	209	8.2	18	68	51	1	1		0	0	1	1
		Haws Athletic Center	209	8.4	18	70	51	0	1		0	0	0	1
		Kaufman	702 ⁶	NA	NA	NA	NA	0	1		0	0	0	1
		Midlothian OFW	145, 702 ⁶ , [826, 831, 838, 839, 840, 841, 842, 846, 849] ⁵	8.4	20	70	57	0	1		0	0	0	3

Appendix K: Particulate Matter of 2.5 Micrometers or Less Monitor Status

Table 2: Particulate Matter of 2.5 Micrometers or Less Monitor Locations and Method Codes¹¹

Metropolitan Statistical Area	2018 Population Estimates ¹	Site Name	Method Code(s)	2016-2018 Annual DV ($\mu\text{g}/\text{m}^3$)	2016-2018 24-Hour DV ($\mu\text{g}/\text{m}^3$)	Percent of NAAQS (Annual ²)	Percent of NAAQS (24-Hour ³)	Required SLAMS FRM/FEM Monitor ⁴	Continuous Monitor ¹⁰	Continuous Requirement Met ¹⁰	Required NCore Monitor	Required Near-Road Monitor	Total Required Monitors ⁴	Total Existing Monitors ⁴
Houston-The Woodlands-Sugar Land	6,997,384			10.2	25	85	71	3	8	Y	4	1	8	13
		Baytown	209	9.3	24	78	69	1	1		0	0	1	1
		Clinton (collocated pair)	145, (145), 702 ⁶	10.2	22	85	63	1	1		0	0	1	2
		Conroe Relocated	702 ⁶	NA	NA	NA	NA	0	1		0	0	0	1
		Galveston 99 th Street	209	6.6	22	55	63	0	1		0	0	0	1
		Houston Aldine (collocated pair)	209, (145)	9.4	25	78	71	1	1		0	0	1	1
		Houston Deer Park #2	145, 170, 185, [810, 811, 812, 838] ⁵	8.2	20	68	57	0	1		4	0	4	4
		Houston East	209 ⁷	NA	NA	NA	NA	0	1		0	0	0	1
		Houston North Loop	145	9.9	23	83	66	0	0		0	1	1	1
		Seabrook Friendship Park	702 ⁶	NA	NA	NA	NA	0	1		0	0	0	1

Appendix K: Particulate Matter of 2.5 Micrometers or Less Monitor Status

Table 2: Particulate Matter of 2.5 Micrometers or Less Monitor Locations and Method Codes¹¹

Metropolitan Statistical Area	2018 Population Estimates ¹	Site Name	Method Code(s)	2016-2018 Annual DV ($\mu\text{g}/\text{m}^3$)	2016-2018 24-Hour DV ($\mu\text{g}/\text{m}^3$)	Percent of NAAQS (Annual ²)	Percent of NAAQS (24-Hour ³)	Required SLAMS FRM/FEM Monitor ⁴	Continuous Monitor ¹⁰	Continuous Requirement Met ¹⁰	Required NCore Monitor	Required Near-Road Monitor	Total Required Monitors ⁴	Total Existing Monitors ⁴
San Antonio-New Braunfels	2,518,036			8.1	24	68	69	2	5	Y	0	1	3	5
		Calaveras Lake	209	7.7	24	64	69	1	1		0	0	1	1
		Old Hwy 90	178 ⁶	NA	NA	NA	NA	0	1		0	0	0	1
		Palo Alto	702 ⁶	NA	NA	NA	NA	0	1		0	0	0	1
		San Antonio Interstate 35	209 ⁷	NA	NA	NA	NA	0	1		0	1	1	1
		San Antonio Northwest (collocated pair)	209, (145)	8.1	19	68	54	1	1		0	0	1	1
Austin-Round Rock	2,168,316			9.8	22	82	63	2	3	Y	0	1	3	3
		Austin North Interstate 35 ⁷	209	NA	NA	NA	NA	1	1		0	1	2	1
		Austin Northwest	702 ⁶	NA	NA	NA	NA	0	1		0	0	0	1
		Austin Webberville Road (collocated pair)	209, (145)	9.8	22	82	63	1	1		0	0	1	1
McAllen-Edinburg-Mission	865,939			10.7	28	89	80	2	1	Y	0	0	2	2
		Edinburg East Freddy Gonzalez Drive	145	9.3	25	78	71	1	0		0	0	1	1
		Mission	209	10.7	28	89	80	1	1		0	0	1	1

Appendix K: Particulate Matter of 2.5 Micrometers or Less Monitor Status

Table 2: Particulate Matter of 2.5 Micrometers or Less Monitor Locations and Method Codes¹¹

Metropolitan Statistical Area	2018 Population Estimates ¹	Site Name	Method Code(s)	2016-2018 Annual DV ($\mu\text{g}/\text{m}^3$)	2016-2018 24-Hour DV ($\mu\text{g}/\text{m}^3$)	Percent of NAAQS (Annual ²)	Percent of NAAQS (24-Hour ³)	Required SLAMS FRM/FEM Monitor ⁴	Continuous Monitor ¹⁰	Continuous Requirement Met ¹⁰	Required NCore Monitor	Required Near-Road Monitor	Total Required Monitors ⁴	Total Existing Monitors ⁴
El Paso	845,553			9.1	24	76	69	1	4	Y	4	0	5	8
		Ascarate Park SE	702 ⁶	NA	NA	NA	NA	0	1		0	0	0	1
		El Paso Chamizal (collocated pair)	145, 170, 185, [810, 811, 812, 838] ⁵	9.1	24	76	69	0	1		4	0	4	4
		El Paso UTEP	145, 702 ⁶	7.7	17	64	49	1	1		0	0	1	2
		Socorro Hueco	702 ⁶	NA	NA	NA	NA	0	1		0	0	0	1
Corpus Christi	452,950			9.1	25	76	71	0	2	NA	0	0	0	4
		Corpus Christi Huisache (collocated pair)	209, (209)	9.1	25	76	71	0	1		0	0	0	1
		Dona Park	145, 702 ⁶ , [826, 831, 838, 839, 840, 841, 842, 846, 849] ⁵	8.0	24	67	69	0	1		0	0	0	3
Killeen-Temple	451,679			NA	NA	NA	NA	0	1	NA	0	0	0	1
		Temple Georgia	209 ⁷	NA	NA	NA	NA	0	1		0	0	0	1
Brownsville-Harlingen	423,908			9.9	25	83	71	0	2	NA	0	0	0	2
		Brownsville	209	9.9	25	83	71	0	1		0	0	0	1
		Isla Blanca Park	209 ⁷	NA	NA	NA	NA	0	1		0	0	0	1

Appendix K: Particulate Matter of 2.5 Micrometers or Less Monitor Status

Table 2: Particulate Matter of 2.5 Micrometers or Less Monitor Locations and Method Codes¹¹

Metropolitan Statistical Area	2018 Population Estimates ¹	Site Name	Method Code(s)	2016-2018 Annual DV ($\mu\text{g}/\text{m}^3$)	2016-2018 24-Hour DV ($\mu\text{g}/\text{m}^3$)	Percent of NAAQS (Annual ²)	Percent of NAAQS (24-Hour ³)	Required SLAMS FRM/FEM Monitor ⁴	Continuous Monitor ¹⁰	Continuous Requirement Met ¹⁰	Required NCore Monitor	Required Near-Road Monitor	Total Required Monitors ⁴	Total Existing Monitors ⁴
Beaumont-Port Arthur	409,526			NA	NA	NA	NA	0	3	NA	0	0	0	3
		Hamshire	209 ⁷	NA	NA	NA	NA	0	1		0	0	0	1
		Port Arthur Memorial School	209 ⁷	NA	NA	NA	NA	0	1		0	0	0	1
		SETRPC 42 Mauriceville	209 ⁷	NA	NA	NA	NA	0	1		0	0	0	1
Lubbock	319,068			NA	NA	NA	NA	0	1	NA	0	0	0	1
		Lubbock 12 th Street	209 ⁷	NA	NA	NA	NA	0	1		0	0	0	1
Laredo	275,910			NA	NA	NA	NA	0	1	NA	0	0	0	1
		World Trade Bridge	209 ⁷	NA	NA	NA	NA	0	1		0	0	0	1
Waco	271,942			NA	NA	NA	NA	0	1	NA	0	0	0	1
		Waco Mazanec	178 ⁶	NA	NA	NA	NA	0	1		0	0	0	1
Amarillo	265,947			NA	NA	NA	NA	0	1	NA	0	0	0	1
		Amarillo A&M	209 ⁷	NA	NA	NA	NA	0	1		0	0	0	1
College Station-Bryan	262,431			NA	NA	NA	NA	0	1	NA	0	0	0	1
		Bryan Finfeather Road	209 ⁷	NA	NA	NA	NA	0	1		0	0	0	1

Appendix K: Particulate Matter of 2.5 Micrometers or Less Monitor Status

Table 2: Particulate Matter of 2.5 Micrometers or Less Monitor Locations and Method Codes¹¹

Metropolitan Statistical Area	2018 Population Estimates ¹	Site Name	Method Code(s)	2016-2018 Annual DV ($\mu\text{g}/\text{m}^3$)	2016-2018 24-Hour DV ($\mu\text{g}/\text{m}^3$)	Percent of NAAQS (Annual ²)	Percent of NAAQS (24-Hour ³)	Required SLAMS FRM/FEM Monitor ⁴	Continuous Monitor ¹⁰	Continuous Requirement Met ¹⁰	Required NCore Monitor	Required Near-Road Monitor	Total Required Monitors ⁴	Total Existing Monitors ⁴
Odessa	162,124			NA	NA	NA	NA	0	1	NA	0	0	0	1
		Odessa Gonzales	209 ⁷	NA	NA	NA	NA	0	1		0	0	0	1
Texarkana	150,242			8.9	19.0	74	54	0	1	NA	0	0	0	1
		Texarkana New Boston	209	8.9	19	74	54	0	1		0	0	0	1
Marshall ⁸	66,726			8.5	18	71	51	0	1	NA	0	0	0	3
		Karnack	145, 702 ⁶ , [810, 811, 812, 838] ⁵	8.5	18	71	51	0	1		0	0	0	3
Eagle Pass ⁸	58,485			NA	NA	NA	NA	0	1	NA	0	0	0	1
		Eagle Pass	209 ⁷	NA	NA	NA	NA	0	1		0	0	0	1
Corsicana ⁸	49,565			NA	NA	NA	NA	0	1	NA	0	0	0	1
		Corsicana Airport	702 ⁶	NA	NA	NA	NA	0	1		0	0	0	1
Kingsville ⁸	31,571			NA	NA	NA	NA	0	1	NA	0	0	0	1
		National Seashore	209 ⁷	NA	NA	NA	NA	0	1		0	0	0	1

Appendix K: Particulate Matter of 2.5 Micrometers or Less Monitor Status

Table 2: Particulate Matter of 2.5 Micrometers or Less Monitor Locations and Method Codes¹¹

Metropolitan Statistical Area	2018 Population Estimates ¹	Site Name	Method Code(s)	2016-2018 Annual DV ($\mu\text{g}/\text{m}^3$)	2016-2018 24-Hour DV ($\mu\text{g}/\text{m}^3$)	Percent of NAAQS (Annual ²)	Percent of NAAQS (24-Hour ³)	Required SLAMS FRM/FEM Monitor ⁴	Continuous Monitor ¹⁰	Continuous Requirement Met ¹⁰	Required NCore Monitor	Required Near-Road Monitor	Total Required Monitors ⁴	Total Existing Monitors ⁴
Big Bend National Park ⁹	NA			NA	NA	NA	NA	0	1	NA	0	0	0	1
		Bravo Big Bend	209 ⁷	NA	NA	NA	NA	0	1		0	0	0	1
Totals								12	48	Y	12	4	28	68

Appendix K: Particulate Matter of 2.5 Micrometers or Less Monitor Status

Table 2: Particulate Matter of 2.5 Micrometers or Less Monitor Locations and Method Codes¹¹

Metropolitan Statistical Area	2018 Population Estimates ¹	Site Name	Method Code(s)	2016-2018 Annual DV ($\mu\text{g}/\text{m}^3$)	2016-2018 24-Hour DV ($\mu\text{g}/\text{m}^3$)	Percent of NAAQS (Annual ²)	Percent of NAAQS (24-Hour ³)	Required SLAMS FRM/FEM Monitor ⁴	Continuous Monitor ¹⁰	Continuous Requirement Met ¹⁰	Required NCore Monitor	Required Near-Road Monitor	Total Required Monitors ⁴	Total Existing Monitors ⁴
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¹United States Census Bureau population estimates as of July 1, 2018.

²Current PM_{2.5} Annual NAAQS is 12 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

³Current PM_{2.5} 24-hour NAAQS is 35 $\mu\text{g}/\text{m}^3$.

⁴Individual monitors may fulfill multiple requirements and are only counted once. Collocated quality control monitors are not included in totals.

⁵Speciation monitor for NCore, Chemical Speciation Network (CSN), or special purpose requirements.

⁶Method code identifies a PM_{2.5} TEOM which is non-FEM/FRM (non-NAAQS comparable)

⁷Annual values do not meet completeness criteria; monitors deployed in 2017, 2018, or 2019. Incomplete design value information is not used for regulatory compliance.

⁸Area is classified as a micropolitan area and is not subject to SLAMS requirements.

⁹Area not classified as a metropolitan or micropolitan statistical area.

¹⁰Continuous PM_{2.5} monitor network total must equal at least one-half the required number of SLAMS-required sites and each MSA with SLAMS-required sites must have a minimum of

¹¹This list does not include metropolitan statistical areas with no requirement and no monitors.

- number

[] - include PM_{2.5} speciation method codes

DV - design value

FEM - federal equivalent method

FRM - federal reference method

Hwy - highway

NA - not applicable

NAAQS - National Ambient Air Quality Standards

NCore - National Core Multipollutant Monitoring Stations require PM_{2.5} FRM mass, PM_{2.5} FEM continuous mass, PM_{10-2.5} and PM_{2.5} CSN speciation

N - no

OFW - Old Fort Worth

PM_{2.5} FRM mass method code 145

PM_{2.5} FEM mass method codes 170 and 209

PM_{2.5} non-regulatory mass method code 702

PM_{2.5} speciation method codes 810, 811, 812, 826, 831, 838, 839, 840, 841, 842, 846, and 849

PM_{10-2.5} coarse method code 185

SETRPC - Southeast Texas Regional Planning Commission

SE - southeast

SLAMS - State or Local Air Monitoring Stations

UTEP - University of Texas at El Paso

Y - yes

Appendix L

Volatile Organic Compound and Carbonyl Monitor Status

**Texas Commission on Environmental Quality
2020 Annual Monitoring Network Plan**



Appendix L: Volatile Organic Compound and Carbonyl Monitor Status

Table 1: Volatile Organic Compound Monitor Status

Core Based Statistical Area ¹	Required PAMS VOC AutoGC Monitors	Existing VOC Canister Monitors	Existing VOC AutoGC Monitors	Total Existing VOC Monitors
Dallas-Fort Worth-Arlington	1	3	2	5
Houston-The Woodlands-Sugar Land	1	0	3	3
El Paso	0	0	1	1
Beaumont-Port Arthur	0	0	2	2
Laredo	0	1	0	1
Totals	2	4	8	12

¹This list does include metropolitan statistical areas with zero requirements and zero monitors.

AutoGC - automated gas chromatograph

PAMS - Photochemical Assessment Monitoring Stations

VOC - volatile organic compound

Table 2: Carbonyl Monitor Status

Core Based Statistical Area ¹	Required PAMS Carbonyl Samplers	Total Existing Carbonyl Samplers
Dallas-Fort Worth-Arlington	1	2
Houston-The Woodlands-Sugar Land	1	2
Totals	2	4

¹This list does not include metropolitan statistical areas with zero requirements and zero monitors.

PAMS - Photochemical Assessment Monitoring Stations